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BORIS T. PASH

BOX NO. 2

ACCESSION NO. 72033-8.19

2-1 Boris Pash

[redacted]

Alsos Mission
General
General
1944

HEADQUARTERS

4 JAN 44

SA41

SF V VX NBR 43 WD

FROM OREAR DIR PD NSC FORT DOUGLAS UTAH JAN 4 2313Z

TO CO FWD ECH HNSC PRESIDIO OF SAN FRANCISCO CALIFORNIA

ORDERS HAVE ISSUED THIS HQ RELIEVING LT COL BORIS T PASH MI AND LT COL GEORGE R ECKMAN MI FR ASGMT AND DY SCU ONE NINE HUNDRED FWD ECH YOUR STA EFF ON OR ABOUT FIVE JAN FORTY FOUR AND THEN ASGNG THEM TO SCU ONE NINE ONE SIX CENTRAL SECURITY DIST SANFRANCISCO CALIF END SPRPO

BT 0120Z

INFORMATION COPY

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SECRET

HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

25 October 1944

SUBJECT: Thorium - Summary of New Information in Attached Report

TO : Major General L. R. Groves, Room 5119, New War Building, Washington, D.C.

1. The facts on German thorium interest in France, to date, are as follows:

a. During the war Auer has accumulated an equivelant of 113 tons of thorium oxide.

b. Monazite sands, equivelant to approximately 30 tons of thorium oxide were taken by the Germans from France in September 1940. The cerium content of the sands were of prime interest to Auer, possibly for use in the manufacture of sun glasses.

c. The 480 tons of monazite sands remaining were processed in France and the cerium recovered for the Germans.

d. There was no German interest in thorium by the Germans until June 1942. Increased interest was evidenced in 1943. Intense interest was apparent in 1944. All stocks were requisitioned and shipped to Auer in Germany, in March 1944. This tonnage was equivelant to 30 tons thorium oxide (including rarer earths such as cerium).

e. Question One: What is the significance of the German remarks on the P_2O_5 content of the sands?

Question Two: What are the requirements in America for cerium oxide, total tonnages and uses? How does this compare with the Auer stocks?

ROBERT R. FURMAN
Major, CE

Incls.:
1 - ltr dtd 23 Oct 44 from Dr. Goudsmit
2 - two copies translation dtd 18 Oct 44

DECLASSIFIED
E.O. 11652, Sec. 3(E) and 5(D) or (E)
Authority NND 750112
By CD/se NARS, Date 17 Feb 1976

SECRET

B-12-6.6(E)

SECRET

HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

23 October 1944

SUBJECT: Thorium

TO : Major R. R. Furman

1. Information regarding German acquisition of thorium products in France is summarized in the attached translation of a memorandum prepared for us by Mr. Paul Gregory, Acting Manager, Societe des Produits Chemiques des Terres Rares.

2. Among the metals described as "other rare earths of the cerium family", lanthanum is present in monazite sand. The percentage of this material present is not known.

S.A.G.
DR. S. A. GOUDSMIT
Scientific Chief

Incls.; (2)
2 copies report translation dtd 18 Oct 44.

DECLASSIFIED
E.O. 11652, Sec. 3(E) and 5(D) or (E)
Authority NND 750112
By CD/SR NARS, Date 17 FEB 1976

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HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

23 October 1944

SUBJECT: Translation of Memorandum Written by M. Paul Gregory, Acting Manager of Societe des Produits Chimiques des Terres Rares.

18 October 1944

Commencing in September 1940, the Germans took possession of stocks of monazite sands located in France.

They immediately dispatched the following to Germany:

762 tons of sand from Travancore stored at Rouen (thorium oxide content approximately 8-9%).
120 tons of Travancore sand taken from the Serquigny (Eure) plant of Terres Rares,
and approximately 100 to 150 tons of Brazilian monazite taken from various other plants.

This total tonnage corresponds to about 80 tons of thorium oxide which was no doubt recovered by Auer in their plant at Oranienburg, near Berlin, as a by-product in the processing of monazite to extract oxides of rare earths of the cerium family used by Auer in their glass factories.

It is probable that Auer had stocks of monazite at their Oranienburg plant but we have no information concerning their size.

We are also without information as to the quantities of minerals they were able to secure outside of France during the war.

The Germans left in France about 480 tons of monazite sand (340 from Travancore and 140 from Brazil) which they had treated (under the supervision of an Auer representative with full authority from the German high command) to recover pure cerium oxide and other colored oxides.

We believe that the latter were of interest to Auer primarily for use in colored glasses for sun glasses, etc. We know that pure cerium oxide was sold in Belgium and Switzerland and even in France. This latter product appears to have been of interest primarily for resale, and particularly as a source of foreign exchange.

Returning to thorium, this product certainly was of no particular interest at first either to the German authorities or to Auer.

No objection was made to a few sales to French industry for incorporation in magnesium cements, but all sales and stocks were strictly supervised.

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E.O. 11652, Sec. 3(E) and 5(D) or (E)
Authority NND 750112
By CD/SR NARS, Date 17 FEB 1976

It was only in June 1942 that Auer manifested for the first time the intention of taking a large part if not the total French stocks of thorium sulphate.

We did not get the impression at that time that the need was particularly urgent, but rather that it was in connection with a purely commercial matter, as the question of price at first appeared to be controlling with Auer.

They apparently believed that they could fix a very low export price when it had been demonstrated that the domestic French market could not absorb the total tonnage.

In order to keep this material out of German hands, in January 1943 we made a fictitious sale to French companies who pretended to need large tonnages for special fertilizer experiments.

This did not seem to surprise the Germans who told us they had planned similar uses of thorium, but had given the idea up because of the impossibility of producing the quantities which would eventually be required, as estimated by German agricultural experts.

It was unfortunately not possible to keep the entire stock of thorium from the Germans by these means for they continued to watch it. We were however able to divert 30 to 35 tons of thorium sulphate.

It was only at the beginning of 1944 that Auer became seriously interested in this product and with the full support of the German authorities, who requisitioned all stocks then existing in France. Further discussion served only to delay their seizure.

The material was sent to Germany in the first week of March 1944 under the supervision of an Auer representative.

A small quantity which we had been able to set aside was taken on 27 June 1944 when the German authorities sent military trucks to remove finished and semi-finished products still remaining in our Serquinguy factory.

The tonnage taken by the Germans amounted to 166 tons of crude thorium sulphate, which is equivalent to 73 tons of total oxides, including oxides of rare earths of the cerium family (M_2O_3).

This crude thorium sulphate contained as impurities, besides the latter oxides, approximately 0.5 to 0.8% P_2O_5, which was the subject of violent complaints by Auer who desired a product containing less than 0.5% P_2O_5.

The material was sent to the Auer factory at Oranienburg (near Berlin).

We have never known to what extent this factory was damaged by bombing of the Berlin area. We heard at one time that the windows were broken in all the buildings, but it was claimed that work had not been interrupted.

SECRET

23 October 1944

On the other hand, we know that Auer's main office, Friedrich-Krause-U for 24, Berlin N65, was largely destroyed, and that the various departments were dispersed in numerous locations in Berlin and vicinity.

SUMMARY:

The Germans took in France from September 1940 about a thousand tons of monazite sand (equivelant to about 80 tons of thorium oxide) which we understand was processed in Auer's Oranienburg plant.

The Germans, although watching them, did not appear for a long time to be particularly interested in French Stocks of thorium sulphate. It was therefore possible to dispose of a portion of these stocks.

It was only at the beginning of 1944 that they decided to take possession of all the remaining stocks of this product, and most of it was sent to Germany (Oranienburg) between 1 and 6 March 1944. A portion which had been set aside at the plant (Serquiguy) was taken at the time of the allied advance, 27 June 1944.

In total, the Germans took 166 tons of crude sulphate. This tonnage corresponds to about 70 tons of thorium oxide with impurities of about 3% of oxides of rare earths of the cerium family and about 8% P_2O_5.

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6 April 1944

Subject: Commendation.

To: Lieutenant Colonel Boris T. Pash
Manhattan Engineer District, OCE.

1. From 1 May 1943 until 24 November 1943, under the specific direction of the Assistant Chief of Staff, G-2, War Department General Staff, you conducted counter intelligence operations of great importance to the protection of the vital work which is under my direction. These operations presented unusual difficulties in that you were required to conduct important operations without the knowledge and in many cases without the assistance of your immediate superiors.

2. During the period 24 November 1943 to 27 February 1944, you were the Commanding Officer of a mission charged with the gathering of certain information in Italy. The composition and objects of this mission were unique, and its successful accomplishment presented unusual difficulties.

3. The superior manner in which you accomplished both of these missions should be a source of pride to you.

4. For reasons of security, this letter cannot be delivered to you at this time;but it is being retained in the files of my office for delivery when the military situation permits.

/s/ L. R. Groves

L. R. GROVES
Major General, C.E.

CERTIFIED TO BE
A TRUE COPY:

/s/ Howard J. Osborn

HOWARD J. OSBORN
Major, GSC

48

SECRET Decl. by Gen. Groves

~~SECRET~~

WDGB!
Col. Nicholas
72536

MAY 11 1944

General Dwight D. Eisenhower,
Commanding General, U. S. Army Forces,
European Theater of Operations,
London, England.

Dear General Eisenhower:

Lt. Colonel Doris T. Pash, who will deliver this letter, has been designated Chief of the Scientific Intelligence Mission organized by G-2 of the War Department to procure intelligence of the enemies' scientific developments. The Director of the Office of Scientific Research and Development is assisting G-2 in the conduct of this mission, and I consider it to be of the highest importance to the war effort.

Colonel Pash was Chief of the Alsos Mission, which operated for similar purposes in Italy. The results obtained from that mission indicate that its activities should be extended to other regions. It is believed that considerable important information will be procured in the European Theater of Operations, particularly after the occupation of territories now under Axis control.

The scientific group of the mission will be headed by a scientist to be selected by the Office of Scientific Research and Development, and it will include the necessary additional scientists competent to seek and evaluate the information. However, your assistance is essential, and I hope that you will give Colonel Pash every facility and assistance at your disposal which will be necessary and helpful in the successful operation of this mission.

The organization and objectives of the mission are more fully explained in a memorandum to the Chief of Staff, ETOUSA, from Major General Clayton Bissell, Assistant Chief of Staff, G-2, WDGS, dated 3 May 1944.

MAY 12 1944

Sincerely yours,

HENRY L. STIMSON

Secretary of War.

COORDINATION
AND RECORD DIV.
OFF. SEC. WAR

DECLASSIFIED
DOD Dir. 5200.9, Sept. 27, 1958
NMW by ___ date 10/3/67

ORIGINAL DISPATCHED FROM
OFFICE CHIEF OF STAFF
given to Col. Pash

MAY 11 1944

~~SECRET~~

Copy for S/W

COPY
from
THE NATIONAL ARCHIVES
Record Group No. 319

~~CONFIDENTIAL~~

Hq European T of Opns USA

CONFIDENTIAL

DCG/jrp
APO 887
8 Aug 1944

AG 300.4 (8 Aug 1944) 351n

Subject: Orders.

DECLASSIFIED 17-11/81
(see back of document) date

To: Officers and Civilian Concerned.

1. The officers and civilian named below will proceed by Supreme Hq, Allied Expeditionary Force Courier Plane on or about 9 Aug 1944, from their present station in the United Kingdom to such points within the combat zone in Northwestern Europe, on duty as indicated, as may be necessary to carry out the verbal instructions of the Commanding General, Com Z, European T of Opns USA, and, upon completion of this duty, will return to their proper station. They will report to the Commanding General, Com Z, European T of Opns USA (on continent), upon arrival.

COL WAYNE R. ALLEN, 0171232, Inf	TD for four (4) days
COL WALLACE M. ALLISON, 010467, GSC	Indefinite TD
COL SAMUEL A. DANIEL, 018835, Ord Dept	Return for duty
COL JOSEPH C. ODELL, 012439, QMC	Indefinite TD
COL HORACE K. WHALEN, 018727, GSC	Return for duty
LT COL THOMAS V. BARBER, 0908148, QMC	Indefinite TD
LT COL BRYAN C. T. FENTON, 020088, MC	Indefinite TD
LT COL BORIS T. PASH, 0255706, MI	TD for fifteen (15) days
LT COL BENO C. SCHMIDT, 0906837, AUS	TD for four (4) days
LT COL FREDERICK M. SPERRY, 0285910, GSC	Return for duty
Mr GERALD L. BEATSON, Civilian	TD for fifteen (15) days

2. The officers named below will proceed on or about 9 Aug 1944, from their present station in the United Kingdom to such points within the combat zone in Northwestern Europe, on duty as indicated, as may be necessary to carry out the verbal instructions of the Commanding General, Com Z, European T of Opns USA, and, upon completion of this duty, will return to their proper station. They will report to the Commanding General, Com Z, European T of Opns USA (on continent), upon arrival.

CAPT JOHN H. CHALMERS, 0338876, QMC	Return for duty
CAPT HAROLD R. WESTON, 01578030, QMC	Indefinite TD

3. Travel will be performed by military, naval or commercial aircraft, surface transportation, Government motor vehicle and/or rail. If travel is performed by surface transportation, the officers named above will report to the Port Commander, Southampton, for necessary transportation.

4. Reimbursement not to exceed four dollars ($4.00) per day for quarters and an allowance of one dollar and twenty five cents ($1.25) per day for subsistence, is authorized each of the officers named above while traveling within the United Kingdom and while in the United Kingdom.

5. The officers and civilian named above are members of the Allied Expeditionary Force.

6. TCNT. TDN. 60-136, 114 P 432-02 A 212/50425.

By command of General EISENHOWER:

DONALD C. GALLUP,
Captain, AGD,
Asst Adjutant General.

DISTRIBUTION:

CG, Com Z, European T of Opns USA (on continent) 1
G-4 49
Each Officer ..... (4)
Mr Beatson ..... (4)
G-5 1
Army Exchange Sv 1
QM Sec 1
Ord Sec 1
Med Sec, APO 871 1
G-2 1
Ord Sec, APO 871 1
Officers Branch 12
Pers Misc Br, AGO 1

~~CONFIDENTIAL~~

CONFIDENTIAL

AUTHORITY: MEMORANDUM FOR Chief, Office of Industrial Security
Contract Administration Services
Defense Supply Agency (13 Aug 73)
Hoover Institute Declassification Program

Subject:

Reviewer: EHM

~~CONFIDENTIAL~~

Hq European T of Opns USA

DCG/se
APO 887
14 August 1944

AG 300.4(14 Aug 44) 632H

CONFIDENTIAL

DECLASSIFIED Mar/87
(see back of document) date

Subject: Orders

To: Officers Concerned.

1. The officers named below will proceed by Supreme Hq Allied Expeditionary Force Courier Plane on or about 15 Aug 1944 from their present station in the United Kingdom to such points within the combat zone in Northwestern Europe, on duty as indicated, as may be necessary to carry out the verbal instructions of the Commanding General, Com Z, European T of Opns USA, and, upon completion of this duty, will return to their proper station. They will report to the Commanding General, Com Z, European T of Opns USA (Fwd), upon arrival:

BRIG GEN NICHOLAS H. COBBS, 08237, USA	temp dy of five (5) days
COL MARVIN O. BOYLE, 04539, IGD	temp dy of five (5) days
Chaplain (COL) L. CURTIS TIERNAN, 0173777	temp dy of seven (7) days
LT COL EDWARD J. BUTZKE, 0254868, QMC	DS w/67th Hq & Hq Co, QM Base Dep
LT COL MERTON H. FARNSWORTH, 0329047, Inf	temp dy of ten (10) days
LT COL BORIS T. PASH, 0275706, Inf	indefinite temp dy
LT COL CULBRETH N. RICE, 0315472, QMC	DS w/67th Hq & Hq Co, QM Base Dep
LT COL HENRY M. RUND, 0415645, AGD	temp dy of three (3) days
MAJ KELLY L. BRAZIER, 0309672, FD	temp dy of one (1) day (Courier)
Chaplain (MAJ) JUDAH NADICH, 0461635	temp dy of seven (7) days
MAJ THEODORE E. WOODWARD, 0368004, MC, (on temp dy in this theater)	DS w/Hq, Com Z (Fwd) APO 350
CAPT FRANK F. SAILER, 0363952, Ord Dept	temp dy of one (1) day
Mr LASHMAN C. AARONS, Civilian	temp dy of five (5) days

2. Travel will be performed by military, naval or commercial aircraft, surface transportation, Government motor vehicle and/or rail. If travel is performed by surface transportation, the officers and civilian named above will report to the Port Commander, Southampton, for necessary transportation.

3. Reimbursement, not to exceed four dollars ($4.00) per day for quarters and an allowance of one dollar and twenty five cents ($1.25) per day for subsistence is authorized each of the officers named above, except MAJ WOODWARD, while traveling within the United Kingdom and while in the United Kingdom.

4. All of the officers named above, except MAJ WOODWARD, are members of the Allied Expeditionary Force.

5. TCNT. TDN. 60-136, 114 P 432-02 A 212/50425.

By command of General EISENHOWER:

DONALD C. GILLUP,
Captain, AGD,
Asst Adjutant General.

DISTRIBUTION:
CG, Com Z, European T of Opns USA (Fwd)....1
CG, Southern Base Sec, Com Z, APO 519.....1
G-4.....53
Each officer concerned.....(4)
Mr Aarons.....(4)
G-3.....1
Senior Chaplain.....1
G-2.....1
O of Fiscal Director.....1
IG.....1
Army Exchange Sv.....1
QM Sec, APO 871.....1
AG Casualty Br, APO 871.....1
Med Sec.....1
Pers Misc Br, AGO.....1
Pers Misc Br, APO 871.....1
Officers' Br.....13
201 File.....(1)
Morning Report.....(1)
AG Classification.....1

CONFIDENTIAL

~~CONFIDENTIAL~~

AUTHORITY: MEMORANDUM FOR Chief, Office of Industrial Security
Contract Administration Services
Subject: Defense Supply Agency (13 Aug 73)
Hoover Institute Declassification Program
Reviewer: EHM

SECRET

MOVEMENT OF MATERIAL

8 Sept. 1944 - Mr. Henri Le Cointe of Societe Miniere du Haut Katanga informed Lt. Col. B. T. Pash of the presence of 81 barrels of uranate of soda in the warehouse of the Poudre Ries Natinnales in Toulouse.

2 October 1944 - Lt. Col. B. T. Pash, Major J. R. Vance and Capt. R. C. Augustine verified the presence of 81 barrels of uranate of soda in the warehouses of the Poudre Ries Nationales, Toulouse.

✓11 October 1944 - Col. Pash took possession of above goods; gave receipt to warehouse foreman; loaded goods on 16 Army trucks. Convoy proceeded to Marseilles, Col. Pash and Capt. Augustine accompanying.

12 October 1944 - Convoy arrived Marseilles. Col. Pash stored goods in U. S. Government warehouse under guard.

14 October 1944 - Pash informally turned over goods to Captain Augustine with orders to load on first available Navy transport and to accompany goods to any U. S. port and to turn over to Major General L. R. Groves or his designated representative.

15 October 1944 - Captain Augustine loaded goods on U.S.S. Henrico, Navy transport and boarded U.S.S. Henrico. U.S.S. Henrico departed Marseilles.

✓17 October 1944 - U.S.S. Henrico arrived Naples; anchored in harbor; discharged troops and departed Naples same date.

✓20 October 1944 - U.S.S. Henrico arrived Oran.

✓25 October 1944 - U.S.S. Henrico departed Oran.

8 November 1944 - U.S.S. Henrico arrived Boston (Pier 4, East Boston)

9 November 1944 - Captain Augustine discharged goods on docks; placed guard and informally turned over goods to Major John R. Vance.

(Informal memo in file)

SECRET

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E.O. 11652, Sec. 3(E) and 5(D) or (E)
Authority NND 750112
By CD/Sa NARS, Date 23 FEB 1976

WAR DEPARTMENT
MILITARY INTELLIGENCE SERVICE
WASHINGTON

23 August 1944

Lt. Col. B. T. Pash
Hq, ETOUSA
Office of A.C. of S., G-2
APO 887
% PM, New York, New York

Dear Colonel Pash:

First of all let me thank you for your very encouraging personal letter of 16 August. Your expression of confidence in me and the job that I have tried to do has made me more determined than ever to "carry the ball" here in the War Department.

There have been many developments here lately that have a direct bearing on your activities in the theater, and I feel that a personal letter regarding them will serve to temper and clarify the official information as received through channels. Because of the varied nature of the subjects I wish to discuss, they can be grouped under the identifying headings as follows:

a. CIC Personnel - A cable was prepared and dispatched today informing you through official channels that a request for the theater's approval relative to the allotment of CIC personnel for ALSOS activities would be dispatched in the near future. It would be very helpful, if it is possible, for you to expedite the theater's affirmative reply regarding this request. All the necessary concurrences and approval have been informally secured within the War Department, and upon receipt of theater approval, I am sure that the final action will satisfy the conditions of your original request.

b. Scientific Personnel - The problem of securing personnel to assist you and Major Ham has been difficult and has caused me great personal concern. The three major customers of the ALSOS Mission were decidedly reluctant to send additional scientific personnel to the Mediterranean since each felt that his particular interest had expired as far as this area was concerned. Dr. Goudsmit made every possible effort to comply with your urgent demands to furnish scientific assistance to Major Ham and deserves full credit for his efforts to comply with your request. The need for a scientist in this area was made even more imperative by the fact that it

FOR VICTORY BUY UNITED STATES WAR BONDS AND STAMPS

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BY NARS, Date

was absolutely impossible by any means to secure the departure of Major Fisher prior to 1 September. I have, however, made arrangements to have Major Fisher's orders issued now and I am trying to expedite his departure on the First of September. The matter of an additional scientist to assist Ham in the evaluations of target information both in Italy and Southern France has finally been settled by Captain Schade's action in granting his approval to the dispatch of Lt. Comdr. E. S. Gilfillan, a qualified scientist, sometime prior to 1 September. After considerable effort on the part of all concerned here in the ALSOS office in the War Department, all available target information was dispatched via Jica Pouch to Ham on 18 August. This information plus the services of Comdr. Gilfillan and the services of Major Fisher after the first of September will, I am sure, clear up the Mediterranean situation for the time being at least.

The overall picture of ALSOS activities in the European Theater has become more optimistic with the final departure of the first target group (Sam, Hickman, Noyes, Cromartie, Ranger and Foran). Dr. Brode is presently recuperating from a recent illness, but it is tentatively planned that he will leave for the UK with Dr. Sherwood on or about the first of September. It is my opinion that you will be faced with a problem when the scientific personnel arrive, since they are all extremely reluctant to function in a scientific planning capacity and are anxious to travel to the continent and function in an operational capacity. I consider it vital that Dr. Goudsmit submit through you a preliminary plan of ALSOS scientific objectives to the Chief, MIS. G-2 and the Policy Staff are very anxious to have this in at least rough draft form as called for in the Memorandum for the D/CS of 11 May 1944. If you think it advisable, I would also suggest that you have a talk with Sam and emphasize again that his present position as scientific chief of the mission requires that he furnish you active assistance in the technical planning and of the Mission. His actions here in the War Department would serve to indicate that he has neglected or has forgotten his responsibility in this respect. Dr. Walter F. Colby, Deputy Scientific Chief in Sam's absence, is a quiet gentleman, very thorough and quite competent. It is entirely possible, however, that it will be necessary to assist him in his efforts to secure the services of scientific personnel from OSRD.

It is contemplated that Captain Schade and Naval personnel will leave very shortly and Captain Schade has personally requested that I inform you that it is their desire to travel to the continent very shortly after their arrival in London.

Colonel Adams and myself have had several conferences with Colonel Gruhn, Intelligence Division, ASF, and have been assured by him that additional personnel to represent the various technical agencies within

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Authority NND 750122
BY NARS, Date
BY NARS, Date

ASF will be forthcoming. We have also made arrangements for them to contribute target information of their own for use upon their arrival in the theater. This to my knowledge had not been done prior to this date, and it would appear that many of them were going along for a sight seeing trip. The Ordnance Department is showing continued interest in naming personnel for attachment to the Mission, and it appears that they will soon come through with a formal request for personnel to be attached to the Mission from Washington. All our efforts at the present time are directed toward securing a backlog of scientific personnel for you to draw upon in the event that they are urgently needed. RRF has, I am sure, many personnel up his sleeve at the present time. The Navy participation is assured but active effort will have to be diplomatically applied to OSRD. At the present time, with the exception of Dr. Brode and Dr. Sherwood, there are no personnel from OSRD who would be available for departure in even two weeks time.

c. ALSOS Status, WD - Your Memo to Colonel Nicholas re additional scientific personnel was referred by him to the Chief, MIS, for necessary action. Under the provisions of the recent reorganization of G-2, MID, Colonel Nicholas is very reluctant to handle any subject that is not clearly defined as being a policy matter. He has been very helpful in advising me from time to time, but because of his reluctance to take action (since all Mission questions, except those of policy are delegated to Chief, MIS) I have come to depend more and more on Colonel Adams, who has been a great help and who has willingly come to my support when a little rank is needed. Colonel Nicholas referred a copy of your letter to me and indicated that he intended to refer this to the Chief, MIS for the necessary action as being a matter of primary concern to MIS. I informed Colonel Adams of this action and he immediately took it up with General Osmun. The General was quite concerned because you had addressed an official matter to G-2 level, but this was explained by Colonel Adams to General Osmun's satisfaction. I would like to request that you do not pursue this matter any further since it has been straightened out to everyones satisfaction. In the future, it would be advisable for you to address official communications to the Chief, MIS, directly or to the attention of Colonel Adams OR TO ME. I am sure that Colonel Adams understands your problems and is really on our side of the fence. General Osmun now looks to him for decisions on all ALSOS Mission activities and Colonel Adams in turn refers them to me for necessary action. This working arrangement is progressing in an entirely satisfactory manner at the present time and unless you decide to the contrary should not be changed. The Deputy A. C. of S., G-2, had several questions regarding paragraphs 9, 10, 11, 12, 13, 14 and 16 of your Progress Report #1, which, I believe, I answered in a two page Memorandum for General Osmun's signature. This matter should not concern you as it is merely paper work and involves

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Authority NND 750122
BY NARS, Date
Authority NND 750122
BY NARS, Date

only that we justify your recommendations as approved by Chief, MIS. I am sure that we have done this.

Unless I am sadly mistaken, I imagine Dr. Goudsmit will arrive in London with the statement that the ALSOS office here is overworked. This is not true to any extent since I have secured the temporary loan for five weeks of an additional typist and an enlisted linguist to help in the compilation of target information. Both Miss Zimmerly and myself are kept very busy with administrative detail, and at times feel a little pressure to get things done accurately and on time. I think I can speak for Miss Zimmerly when I say that we both prefer to be busy and are thriving on the activity. You need not be concerned about my being lost here when the scientific personnel, Lt. Augustine and Colonel Eckman have departed. I feel entirely at home in MID and feel that I know all the ropes fairly well. I have, I believe, a pretty complete picture of the background of the ALSOS Mission at the present time and have at least a moderate hold upon all activities. I sincerely feel that your confidence in me and the backing that has been furnished by Colonel Adams will enable me to handle the job as you would want it done. On the other hand I want you to have every confidence in us and realize that we are fighting the Battle of the Potomac to the best of our ability. Every request you may make will have our active and continuous support despite the fact that we may be somewhat delayed in compliance by routine administrative difficulties. The Osborn-Zimmerly partnership is moving right along and will continue to do so until your return.

I think a letter from you to Colonel Adams thanking him for his active interest and wise counsel would be strictly in order and greatly appreciated by him. He has, I believe, interpreted your requests exactly as you intended them to be interpreted, and has been of great assistance to me in facilitating War Department action.

This could hardly be called a letter and might properly be designated as an "omnibus" but I think it will serve to give you background information that is very difficult to express in an official letter. Taking everything into consideration, I can assure you that ALSOS activities in the War Department are progressing in a satisfactory manner. I will keep you informed of developments as they occur and will continue to give you all the information that is made available to me.

With best personal regards.

Sincerely yours,

Howard J. Osborn

HOWARD J. OSBORN
Captain, CAC

P.S. We are enclosing a list showing the present personnel of the ALSOS Mission. Please let Dr. Goudsmit see it.

DECLASSIFIED
Authority NND 750122
BY NARS, Date

131725A
Form 125D

N-1908

RAD

Signal Corps, United States Army

~~SECRET~~

Telegram

GPO 3—10565

Received at

19

PENINSULAR BASE SECTION
SIGNAL MESSAGE CENTER

14 JANUARY 1944

SECRET

ROUTINE

TO (ACTION) : CG PBS (FOR PASH)
(INFORMATION) : NONE
FROM : STRONG FOR TARVER
DATE TIME SIGNED: 131445Z
DATE TIME REC'D : 131725A
REFERENCE NR. : NONE
CITE : NONE

DO NOT MAKE SENSE REFERENCE TO SERGEANT WHITAKER YOUR PBS 4606 JANUARY 8 AND TO FROST, STEVENS, STMIP YOUR PBS 3707 DECEMBER 29. NO NAMES CORRESPOND WITH SERIAL NUMBERS IN AGO. CLARIFY.

action AFSOS
Info G-2
Sec
CG

DECLASSIFIED 17 Nov 81
(see back of document) date

FORM #18-A

~~SECRET~~

CRYPTO Em

9291

1944 MAR 26 18 40 Z

E

SA240

VA 184

SF V VXA 662 WD P

FROM OREAR DIR PD NSC-FOFTDOUGLAS UTAH 261809Z

TO CO CENTRAL SECURITY DIST SANFRACISCO CALIF

GR NC

ORDERS HAVE ISSUED THIS HQ DIRCTING LT COL BORIS T PASH MI PROCEED ON OR ABOUT TWO NINE MAR FORTY FOUR TO WASHINGTON DC ON TEMP DY PD TRAVEL BY COMMERCIAL AIRCRAFT PAREN PAR THREE B PAREN TWO PAREN AR FIVE FIV DASH ONE TWENTY PAREN IS DIRECTD AND NECESSARY FOR ACCOMPLSHMENT OF EMERGENCY WAR MISSION PD IT IS UNDERSTOOD ORDERS ARE BENG PUBLISHED BY WD MAKING THIS PERM CHANGE OF STA TDN ONE DASH FIVE NAUGHT NINE NAUGHT P FOUR THREE TWO DASH NAUGHT TWO A NAUGHT FOUR TWO FIVE DASH TWO FOUR END SPRPO 1827Z

A TRUE COPY

J. W. Sullivan

J. W. SULLIVAN
1st Lieut, AUS,
Recorder.

HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY

1 September 1944.

Lt. Colonel B.T. Pash,
ALSOS Mission,
c/o G-2 Section, Com Z,
Paris.

Dear Colonel Pash,

I was released from the Canadian hospital last Monday, August 28, and am now quite recovered except for a broken clavicle. It is healing slowly, but the local doctors think that it will take two or three more weeks before it becomes solid. The local medical authorities, however, have just released me for light office duty and have specified that I cannot ride for long distances in vehicles such as jeeps. I am planning to come over as soon as Colonel Eckman can get my orders out and as soon as I can travel by air direct to Paris.

Will you get me a hotel room with a nice soft bed and tell Reese and Kutschko that I will be able to do office-boy work for them, but that I will not be able to go out in the field with them for at least ten days or two weeks.

I have the honor to remain the first and, I hope, only ALSOS casualty - I am feeling fine, but I look like the wrath of God!

Cordially yours,

Mark A. May

MARK A. MAY.

Dr May arrived 6 Sept

#CO MDRP Fitzsimons GH, Denver...17
*(1ST LT PERRY.....14)

#Via Air Mail
*WD Pay Guide Inclosed

R E S T R I C T E D

COPY

ORIGINATORS FILE No. .....

SHAEF MESSAGE FORM

CALL	CIRCUIT No.	PRIORITY	TRANSMISSION INSTRUCTIONS
	NR		

SPACES WITHIN HEAVY LINES FOR SIGNALS USE ONLY

FROM (A) SHAEF FWD — ORIGINATOR — WBS/rmb — DATE-TIME OF ORIGIN AFR 271815B

TO FOR ACTION AGWAR

TO (W) FOR INFORMATION (INFO) ~~FOR ACTION~~

MESSAGE INSTRUCTIONS: GR

(REF. NO.) FWD - 19991 (CLASSIFICATION) ~~SECRET~~ EYES ONLY

THE SPECIAL ALSOS REPEAT ALSOS MISSION HEADED BY BORIS PASH CMA WORKING WITH THE TABE FORCE OF SIX ARMY GROUP HAVE HIT THE JACKPOT IN THE HECHINGEN AREA PAREN FOR THE EYES ONLY OF GENERAL MARSHALL AND THE SECRETARY OF WAR FROM EISENHOWER UNPAREN CMA AND HAVE SECURED PERSONNEL CMA INFORMATION AND MATERIEL EXCEEDING THEIR WILDEST EXPECTATIONS PD FULL DETAILS WILL BE REPORTED LATER THROUGH THE USUAL SECRET CHANNELS CMA BUT WE NOW UNQUESTIONABLY HAVE EVERYTHING AND NONE OF THIS INFORMATION HAS LEAKED OUT

EYES ONLY

~~SECRET~~

DECLASSIFIED
DOD Dir. 5200.9, Sept. 27, 1958
NMW by ... date 9/20/67

DISTRIBUTION: NONE - original distributed

COORDINATED WITH:

THIS MESSAGE MUST BE SENT IN CYPHER IF LIABLE TO INTERCEPTION — INITIALS

THIS MESSAGE MAY BE SENT IN CLEAR BY ANY MEANS — INITIALS

Precedence: URGENT — URGENT

ORIGINATING DIVISION: Chief of Staff

NAME AND RANK TYPED. TEL. NO.: LT COL J.B.MOORE III 5587

AUTHENTICATING SIGNATURE

TH Lor TOR | Opr.

TI

CONFIDENTIAL — SECRET — UNCLASSIFIED — RESTRICTED
DECLASSIFIED ARMY ORDER BY TAG PER SHAEF ltr 27 Jan 1945

115

...op Beale (P).....1
#CO MDRP Fitzsimons GH, Denver...17
*(1ST LT PERRY.....14)
(LT COL PASH.....6)
#Via Air Mail
*WD Pay Guide Inclosed

RESTRICTED

~~SECRET~~

WDGBI
CRN/72526

PENINSULAR BASE SECTION

OFFICIAL BUSINESS

OUTGOING MESSAGE

Office of origin: HG. ALSOS MISSION APO 782 — Date: 8 JANUARY 1944

Classification: SECRET (Restricted - Confidential - Secret) — Telephone: 15591 (Originating officer)

Precedence: ROUTINE (Deferred - Routine - Priority - Operational Priority - Urgent)

To: ~~GEORGE TWO~~ Just WAR

PBS - 4606 DISREGARD MY RADIO OF SIX JANUARY ON DEPARTURE OF FISK WHO REMAINS HERE WITH GROUP PD PENCE PAREN PASH PAREN TO WAR FOR STRONG FOR LANSDALE CARE OF MAJOR W PD S PD TARVER PD SERGEANT WHITAKER ASN ONE EIGHT ONE SIX TWO EIGHT FOUR FOUR REPORTED DUE WITH IMPORTANT INFORMATION SOONER THAN ANTICIPATED PD IN VIEW OF THIS BELIEVE WISE TO KEEP MISSION HERE AND REMAIN MYSELF AT LEAST TO SIX FEBRUARY PD FIELD FOR ALLIS IS EXPANDING PD ABOVE SCHEDULE CONSIDERED WISE FOR HIM PD FURTHER PLANS AND REASONS FOR POSSIBLE CONTINUED ACTIVITY FOLLOWING BY MAIL ~~PD~~

TO WAR NR 5 CLD 99235A OPR AG MAN ☐ TAPE ☐

Distribution

JAN 31 1944 - 10 25

Content and classification authenticated by

L. F. NICKEL,
Lt. Colonel, A. G. D.,
Adjutant General

Signal Corps Message Center Number 693

(Do Not Write in This Space)

*(MAJ COUNTER.....)
CO Cp Beale (p3).....1
#CO MDRP Fitzsimons GH, Denver...17
(LT COL PASH.....6)
#Via Air Mail

U. S. SECRET
Equals British SECRET

HEADQUARTERS FIFTH ARMY
A.P.O. #464 U. S. Army

16 January 1944

Subject: Assistance to Colonel Pash.

To : C.O., Experimental Detachment G-2, AFHQ, with Fifth Army.

1. Colonel Pash is on a highly important mission from the War Department. It is urgently desired and necessary that he be given every assistance by OSS that is possible.

2. His reliability has been thoroughly checked and security will not be violated.

EDWIN B. HOWARD,
Colonel, G.S.C.,
A.C. of S., G-2.

DECLASSIFIED 17 22 84
(see back of document) date

U. S. SECRET
Equals British SECRET

*(MAJ COONEY.....)
CO Cp Beale (p3).....1
#CO MDRP Fitzsimons GH, Denver...17
*(1ST LT PERRY.....14)
(LT COL PASH.....6)
#Via Air Mail
*WD Pay Guide Inclosed

AUTHORITY: MEMORANDUM FOR Chief, Office of Industrial Security
Contract Administration Services
Defense Supply Agency (13 Aug 73)
Subject: Hoover Institute Declassification Program

Reviewer: Ethn

DECLASSIFIED
(see back of document) date

Arthur Newman
navy
(Cr. Federal Records)
PRO

AIR TRANSPORTATION AUTHORITY

MEDITERRANEAN AIR TRANSPORT SERVICE
A. P. O. 512

ATA

☐ One Way
☑ Return

No. 78089

PRIORITY					BAGGAGE		
GOING	RETURN	PASSENGER'S NAME	RANK	PERS. WT.	WT. AUTH.	ACTUAL	NO. PCS.
ONE	ONE.	U.S. Mil. PASH.	L/COL.	190		10	

GOING FLIGHT NO.	TIME	DEPARTURE DATE	FROM	TO	VIA
PLANE No. 531.	0800	18 Feb.	NA.	BASTIA.	

RETURN FLIGHT NO.	TIME	DEPARTURE DATE	FROM	TO	VIA
			BASTIA.	NA.	

ORGN. AUTHORIZING TRAVEL	ORDER. NO. OR AUTHORITY	DATED	ATA ISSUED BY	DATE
W.D.	L.O.	NOV. 24	[illegible]	17 Feb.

1. Passengers are required to be at the airport 45 MINUTES BEFORE SCHEDULED FLIGHT TIME.
2. Passengers should have their baggage weighed and then present this ticket to the Air Transportation Office.
3. Baggage weight authorized as indicated above is applicable to INTRA-THEATER TRAVEL ONLY; weight in excess of that authorized will not be carried.
4. THREE HOURS NOTICE prior to Flight time is required for cancellation of this ticket.

M.A.T.S Form O 41 A

Passage for L/Col. PASH, to Corsica and return has been arranged with Lt. HENDERSON. (A.4) 12. A.F.S.C. on 12th. A.F.S.C. Plane No. 531. leaving 0800 hrs. on 18th. Feb. 1944.

IB 201 file P.

Symbols: TDN - Travel directed is necessary in military service
WP - Will proceed to
TPA - Travel by officer or his dependents by privately owned automobile is authorized. DS for officer's travel is authorized, AR 605-180

Special Orders)
:
No.....77) -EXTRACT-

ARMY SERVICE FORCES
Headquarters Ninth Service Command
Fort Douglas, Utah, 27 March 1944

1. LT COL BORIS T. PASH 0275706 MI, SCU 1916 Cen Security Dist, San Francisco, Calif WP o/a 29 Mar 1944 to Washington DC on temp dy. Travel by commercial aircraft(par 3b(2)AR 55-120) is directed and is necessary for accomplishment of an emergency war mission. It is understood that orders are being published by WD making this a permanent change of sta. TDN. 1-5090 P 432-02 A 0425-24. Auth: Verbal auth for MAJ FURMAN, Office of Chief of Engrs, Washington, DC 25 March 1944. (210.482 (SPRPO))

2. MAJ ROBERT R. TAYLOR 0473149 AUS is detailed as a member of board of officers aptd to meet at PW Cp, Florence, Ariz by par 1 SO 331 this hq 1943 as amended, vice LT COL ALBERT E. WILFONG 0147726 CMP hereby reld. (352 OCB (SPRPO))

3. MAJ HENRY M. COUNTER 0323754 MC is reld fr asgmt and dy MDRP, Barnes Gen Hosp, Vancouver, Wash eff o/a 31 Mar 1944 is then asgd to SCU 1918 Sta Com, Cp Beale, Calif. PCS. TDN. TPA. WP. 1-5090 P 431-01-02-03-07-08 A 0425-24. Auth: ASF Memo No S605-20-43, dated 1 Aug 1943 and WD SGO ltr file SPMCM, sub: Asgmt of Med Dept Pers, dated 18 Mar 1944. (210.31 (SPRPO))

4. 1ST LT CLARMOND A. PERRY 0243379 MAC is reld fr asgmt and dy MDRP, Fitzsimons Gen Hosp, Denver, Colo eff o/a 31 Mar 1944 is then asgd to SCU 1979 Baxter Gen Hosp, Spokane, Wash. PCS. WP. TDN. TPA. 1-5090 P 431-01-02-03-07-08 A 0425-24. Auth: ASF Memo No S605-20-43 dated 1 Aug 1943 and WD SGO ltr File SPMCM, sub: Asgmt of Med Dept Pers, dated 18 Mar 1944. (210.31 (SPRPO))

By command of Major General McCOACH:

JOHN H. WILSON,
Colonel, General Staff Corps,
Chief of Staff.

OFFICIAL:

M. F. MOCHAU,
Lieutenant Colonel, A. G. D.,
Adjutant General.

HEADQUARTERS NINTH SERVICE COMMAND
OFFICIAL COPY

DISTRIBUTION:

Asst Ch of Staff G-2, Wash, DC....1
Ch of Engineers.....1
Surg Gen (pp3&4).....1
CO PW Cp, Florence Ariz (p2)....20
(Pres b/o.....2)
(Rec b/o.....10)
(MAJ TAYLOR.....1)
(LT COL WILFONG.....1)
#CO MDRP Barnes GH, Vancouver.....17
*(MAJ COUNTER.....14)
CO Cp Beale (p3).....1
#CO MDRP Fitzsimons GH, Denver...17
*(1ST LT PERRY.....14)
Chief of Staff.....1
Aide-de-Camp.....1
DoS.....1
MPD-Statistical.....2
Engrs.....2
SID.....5
Surg (Asgmt SS).....3
CO Baxter GH.....1
#CO Cen Sec Dist, 625 Sutter St, SF (p1).....8
(LT COL PASH.....6)

#Via Air Mail
*WD Pay Guide Inclosed

S. F. BRANOE, OFFICE
MAR 29 1944
FOLDING
By

R E S T R I C T E D

Symbols: TDN - Travel directed is necessary in military service
WP - Will proceed to
TPA - Travel by officer or his dependents by privately owned automobile is authorized. DS for officer's travel is authorized, AR 605-180

Special Orders)
No.....77) -EXTRACT-

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By command of Major General McCOACH:

JOHN H. WILSON,
Colonel, General Staff Corps,
Chief of Staff.

OFFICIAL:

M. F. MOCHAU,
Lieutenant Colonel, A. G. D.,
Adjutant General.

HEADQUARTERS NINTH SERVICE COMMAND
OFFICIAL COPY

DISTRIBUTION:

Asst Ch of Staff G-2, Wash, DC....1
Ch of Engineers.....1
Surg Gen (pp3&4).....1
CO PW Cp, Florence Ariz (p2)....20
(Pres b/o.....2)
(Rec b/o.....10)
(MAJ TAYLOR.....1)
(LT COL WILFONG.....1)
#CO MDRP Barnes GH, Vancouver.....17
*(MAJ COUNTER.....14)
CO Cp Beale (p3).....1
#CO MDRP Fitzsimons GH, Denver...17
*(1ST LT PERRY.....14)
Chief of Staff.....1
Aide-de-Camp.....1
DoS.....1
MPD-Statistical.....2
Engrs.....2
SID.....5
Surg (Asgmt SS).....3
CO Baxter GH.....1
#CO Cen Sec Dist, 625 Sutter St, SF (p1).....8
(LT COL PASH.....6)

#Via Air Mail
*WD Pay Guide Inclosed

R E S T R I C T E D

RECEIVED
By.....
MAR 29 1944
S. F. BRANCH OFFICE

MAR 25 1944

PASSENGER'S RECEIPT

Not Good for Passage

SALT LAKE to LOS ANGELES

Lockheed Air Terminal, Burbank

FARE ~~$33.15~~ 9.25 7.69

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Form B-101 281860

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495
5
4 45
440

17567

130
9

17567
5600
3594
40
90
34761

0900 12 Oct. 1945

~~Lv.~~

10 6

Left S.F. 1200 31 March 1945
Arr. SL City 1600 31 March 1945
Left SL City 1400 1 April 1945
Arr. Chicago 2200 1 April 1945.
Lv. Chicago
Ar. Wash 2 April

Excess baggage. $8.08 (7.84 + 3%) 564
(receipt for SLC-Chi attached. others lost. 3%

Shipment of personal belongings
Amer. Express 16.50 $27.50
receipts lost.

SECRET

SECRET

130
9

41667	1495	17567
4340	385	5600
120	445	3594
58007	40440	40
40440		40
17567		34261

0400 12 Oct. 1945

10 — 6

Left S.F.	1200	31 March 1945
Arr. SL City	1600	31 March 1945
Left SL City	1400	1 April 1945
Arr. Chicago	2200	1 April 1945.
Lv. Chicago		2 April
Ar. Wash		

Excess baggage. $8.08 (7.84 + 3%) 56¢

(receipt for SLC-Chi attached. others lost. 3%

Shipment of personal belongings

Amer. Express 16.50 $27.50

receipts lost.

SECRET

SECRET

Per diem 0001 15 Sept to 0945 23 Sept. 1945.

ATC	Lv. Wash	1015 hrs	20 Sept. 1945
ATC	Arr. Salt Lake City	1680	22 Sept. 1945.
RR	Lv Salt Lake City	1925 hrs	22 Sept. 1945
RR.	Ar. LA.	0945 hrs	23 Sept. 1945

RR	Lv. S.F.	1630	8 Oct. 1945
RR	Ar. Wash	0900	12 Oct. 1945

~~Lv.~~

10 6

Left S.F.	1200	31 March 1945
Arr. SL City	1600	31 March 1945
Left SL City	1400	1 April 1945
Arr. Chicago	2200	1 April 1945.
Lv. Chicago		
Ar. Wash		2 April

Excess baggage. $8.08 (7.84 + 3%) 56¢

(receipt for SLC-Chi attached. others lost. 3%

Shipment of personal belongings

Amer. Express 16.50 $27.50

receipts lost.

70

SECRET declassified

ADDRESS REPLY TO
CHIEF OF ENGINEERS, U. S. ARMY
WASHINGTON, D. C.

REFER TO FILE NO. _____

WAR DEPARTMENT

OFFICE OF THE CHIEF OF ENGINEERS

WASHINGTON

6 April 1944

Subject: Commendation.

To: Lieutenant Colonel Boris T. Pash,
Manhattan Engineer District, OCE.

1. From 1 May 1943 until 24 November 1943, under the specific direction of the Assistant Chief of Staff, G-2, War Department General Staff, you conducted counter intelligence operations of great importance to the protection of the vital work which is under my direction. These operations presented unusual difficulties in that you were required to conduct important operations without the knowledge and in many cases without the assistance of your immediate superiors.

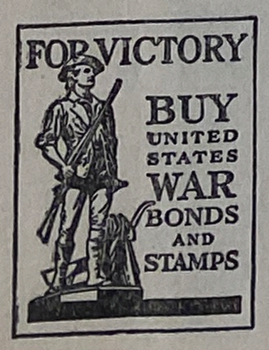
2. During the period 24 November 1943 to 27 February 1944, you were the Commanding Officer of a mission charged with the gathering of certain information in Italy. The composition and objects of this mission were unique, and its successful accomplishment presented unusual difficulties.

3. The superior manner in which you accomplished both of these missions should be a source of pride to you.

4. For reasons of security, this letter cannot be delivered to you at this time; but it is being retained in the files of my office for delivery when the military situation permits.

L. R. Groves

L. R. GROVES,
Major General, C.E.



DECLASSIFIED 17 Nov 81
(see back of document) date

SECRET

AUTHORITY: MEMORANDUM FOR Chief, Office of Industrial Security
Contract Administration Services
Defense Supply Agency (13 Aug 73)
Hoover Institute Declassification Program

Subject:

Reviewer: EHM

~~SECRET~~

WAR DEPARTMENT
THE ADJUTANT GENERAL'S OFFICE
WASHINGTON, 25, D.C.

AG 201-Pash, Boris T.
(10 May 44)PO-A

BDC/lgp/wt/2416
Br. 77167

Secret

10 May 1944
SECRET
Auth: T. A. G.
Initials: 13 JC
Date: 10 May 44.

Subject: Movement Orders.

Thru : Chief, Military Intelligence Service,
Room 2E-770, The Pentagon,
Washington, D. C.

To : Lieutenant Colonel Boris T. Pash, 0275706, MI.

1. Lieutenant Colonel Boris T. Pash, 0275706, MI., is directed to proceed on or about 12 May 1944, on temporary duty, from Washington, D. C., to London, England, and to such other places as may be necessary to carry out the instructions of the Secretary of War. He will report to The Adjutant General, Room 1050, Munitions Building, for processing and transportation, upon completion of which he will proceed from Washington, D. C., and/or New York, New York, to London, England, reporting upon arrival to the Commanding General, European Theater, for duty. Upon completion of this temporary duty he will return to his proper station, Washington, D. C.

2. Travel directed is necessary in the military service. 1-5412 P 432-02, 03 A 0425-24. Travel by air (APR-2-199403-WDP) from Washington, D. C., and/or New York, New York, to London, England, and such other places as may be necessary, and return, is directed and necessary for the accomplishment of an emergency war mission. A baggage allowance of sixty-five (65) pounds, to include all personal effects, is authorized while traveling by aircraft. In lieu of subsistence a flat per diem of $7.00 is authorized while traveling on official business and while absent from permanent station in accordance with existing laws and regulations.

3. Under the provisions of par 18 b, AR 55-110, officer is appointed Acting Transportation Officer for the purpose of issuing Government transportation requests covering travel to be performed under this order.

4. SPECIAL INSTRUCTIONS: Temporary APO 4377, c/o Postmaster, New York, New York. Provisions of POR apply.

By order of the Secretary of War.

THE ADJUTANT GENERAL'S OFFICE
OFFICIAL
WAR DEPARTMENT

Ben D. Fullton
Adjutant General.

3 Incls:
AG ltr 28 Mar 44
Travel Book
AG Form #43

Distribution:
Officer (4)
Officers' Br. Rec. Sec. AGO, Rm 1523 Mul
Major Roach, Rm 1C-915 Pentagon.
Army Postal Service, Rm 4A-514 Pentagon (2)
OIC Embarkation APO, 464 Lexington Ave., NY, NY (2)
Miss Donovan, Rm 2416
Miss Wright, Rm 4A 940, Pentagon
Lt. Col. McMillion, Rm 1050, Mun

Secret

DECLASSIFIED 17 Nov 81
(see back of document) date

AUTHORITY: MEMORANDUM FOR Chief, Office of Industrial Security
Contract Administration Services
Defense Supply Agency (13 Aug 73)

Subject: Hoover Institute Declassification Program

Reviewer: EHM

~~SECRET~~

WDGB 1
Col. Nichols
72536

MAY 11 1944

General Dwight D. Eisenhower,
Commanding General, U. S. Army Forces,
European Theater of Operations,
London, England.

Dear General Eisenhower:

Lt. Colonel Boris T. Pash, who will deliver this letter, has been designated Chief of the Scientific Intelligence Mission organized by G-2 of the War Department to procure intelligence of the enemies' scientific developments. The Director of the Office of Scientific Research and Development is assisting G-2 in the conduct of this mission, and I consider it to be of the highest importance to the war effort.

Colonel Pash was Chief of the Alsos Mission, which operated for similar purposes in Italy. The results obtained from that mission indicate that its activities should be extended to other regions. It is believed that considerable important information will be procured in the European Theater of Operations, particularly after the occupation of territories now under Axis control.

The scientific group of the mission will be headed by a scientist to be selected by the Office of Scientific Research and Development, and it will include the necessary additional scientists competent to seek and evaluate the information. However, your assistance is essential, and I hope that you will give Colonel Pash every facility and assistance at your disposal which will be necessary and helpful in the successful operation of this mission.

The organization and objectives of the mission are more fully explained in a memorandum to the Chief of Staff, ETOUSA, from Major General Clayton Bissell, Assistant Chief of Staff, G-2, WDGS, dated 3 May 1944.

MAY 12 1944

Sincerely yours,

HENRY L. STIMSON

Secretary of War.

DECLASSIFIED
DOD Dir. 5200.9 Sept. 27, 1958
NMW by ___ date 10/3/67

COORDINATION
AND RECORD DIV.
OFF. SEC. WAR

ORIGINAL DISPATCHED FROM
OFFICE CHIEF OF STAFF
given to Col. Pash

MAY 11 1944

~~SECRET~~

Copy for S/W

Col. Pash

COPY
from
THE NATIONAL ARCHIVES
Record Group No. 319

COPY

~~SECRET~~

WDGBI
CPN/72536

11 May 1944

MEMORANDUM FOR THE CHIEF OF STAFF:

Subject: Mission Organized in MID for the Collection of Scientific Intelligence.

1. a. The Chief of Staff has approved the organization of a mission in the Military Intelligence Division for the purpose of collecting intelligence of the enemy's secret scientific developments.

b. This memorandum announces procedure which has been established to govern the mission.

2. Advisory Committee. In the conduct of this mission, A. C. of S., G-2, War Department, is assisted by the Office of Scientific Research and Development, by the Army Service Forces, and by the Director of Naval Intelligence. Representatives of the following constitute an informal advisory committee:

Director, Naval Intelligence
Director, OSRD
Commanding General, ASF
A. C. of S., G-2.

3. a. More detailed objectives of the mission willbe assigned in an intelligence plan furnished the mission by A. C. of S., G-2, after conferring with the Advisory Committee.

b. Agencies desiring that the mission procure special information should furnish a statement of desired information to A. C. of S., G-2, through any member of the Advisory Committee.

4. The mission will proceed to various theaters at times to be determined by A. C. of S., G-2, with the advice and assistance of the Advisory Committee. The mission will follow the advance of Allied forces into occupied territory, remaining the necessary time after the enemy's

App. A-3
Sh.1 of 4

DECLASSIFIED
E.O. 11652, Sec. 3(E) and 5(D) or (E)
Authority NND 750112
By CD/se NARS, Date 25 FEB 1976

~~SECRET~~

defeat and making necessary visits and contacts in order to collect intelligence of the enemy's scientific developments.

5. Organization. The mission will be headed by a Military and administrative chief, assisted by a scientific chief.

It will consist of two groups:

a. A military and administrative group, consisting of the chief of Mission (Lt. Colonel), one administrative assistant (Major), and three interpreters (two Captains and one Lieutenant).

b. A scientific group, consisting of the scientific chief (civilian scientist), plus such additional military and civilian scientists as are attached to the mission with G-2 concurrence by the Director, OSRD, the Commanding General, Army Service Forces, and the Director of Naval Intelligence. It is contemplated that the scientific chief will serve continuously with the mission. Every other scientist is to be attached for a specified duration and purpose (whether for general duty in a theater or for more specific assignment). The attachment of scientists may be proposed by the scientific chief or by any of the three agencies who attach the scientists.

6. Responsibilities.

a. Chief of Mission.

(1) The chief of mission will represent A. C. of S., G-2, War Department, in dealing with theater commanders and their agencies on business of the mission. He will transmit to A. C. of S, G-2, the plans and recommendations of the scientific chief, adding his own comments ments and recommendations. He will be responsible to make the necessary administrative and operational arrangements to execute the approved intelligence plan (see b, below) as far as is practicable. Subject to restrictions imposed by the military situations, limitation of facilities, and wishes of the theater commanders, his arrangements for execution of the plan will be in accordance with the scientific chief's recommendations as to time, place and purpose of successive steps. He will arrange for communications facilities so that the scientific chief may secure reports from members of the scientific group. He will not be responsible for determining the type of information sought, the selection of places and persons from whom information should be obtained, the designation of scientific members to perform tasks, or other similar matters. He will be responsible that provisions of Army regulation 380-5 are complied with, and will determine the classification of reports forwarded to A. C. of S., G-2.

(2) With the help of the scientific chief, the chief of mission will give theater commanders and their agencies any desired

assistance within the capabilities of the mission. For this purpose members of the scientific group will be encouraged to deal directly with various agencies in the theater, on request, with the knowledge of the scientific chief and chief of mission.

b. Scientific Chief

(1) Before the mission proceeds to a theater, the scientific chief will submit to A. C. of S., G-2 , through the mission chief, the draft of an intelligence plan, including the following features: geneal definition of information to be sought, regional outline of most important objectives for investigation or interview (laboratories, institutions, individuals, with statement of principal types of information expected, etc.), nature of reports desired, and other features he may wish to include, The mission chief will add administrative and operational features, and comment on the practicability of the plan from the administrative and operational standpoint. A. C. of S., G-2, will refer the plan to the Advisory Committee for recommendation.

(2) When necessary, minor changes in the intelligence plan may be made by the chief of the mission to meet unforeseen situation or upon the recommendation of the chief of the scientific group. Any proposal for major departure from the plan will be cleared with A. C. ofS., G-2, War Department.

(3) The scientific cheif will determine the assignments of personnel attached to the scientific group, and will be responsible for their indoctrination. He will approve and sign all scientific intelligence reports of the mission, giving his evaluation, and will turn them over to the military chief for transmission to A. C. of S., G-2, by indorsement or covering letter.

7. Personnel. The personnel of the military and administrative group will be furnished by A. C. of S., G-2. The scientific chief will be furnished by the Director, OSRD. Civilian scientists will be furnished by the Director, OSRD, military scientists from military agencies as arranged by the Commanding General, Army Service forces, and Naval scientists from naval agencies as arranged by the Director of Naval Intelligence (see 5 b, above). Special agents, investigators, clerical personnel, etc., will be secured temporarily in each theater as needed.

8. Dissemination of Reports.

a. In forwaring reports to A. C. of S., G-2, the chief of mission will make the following arrangements:

(1) In case the seientific chief has secured the information for purposes of one office under conditons requiring special security, the outer envelope will be addressed to A. C. of S., G-2, by personal name as well as by title, and the inner envelope will bear

the designation of the office for which the information is intended.

(2) In case the information is of general intelligence interest, it will be forwarded in usual report form (suitable for reproduction) to A. C. of S., G-2, War Department.

(3) Copies of all reports will be kept in the file of the mission.

b. In the general situation, a(2) above, G-2 will distribute the reports (plus extra copies on request) to at least the following:

Director of Intelligence, ASF
OSRD
ONI.

Additional distribution will be made to other agencies in accordance with their interests in the subject matter.

9. Subject to restrictions imposed by the theater commander, the chief of mission will arrange so that any member of the scientific group may forward official communications to his home office.

10. The headquarters of the mission will be at or near the headquarters of the theater, or of some subordinate unit within the theater. The chief of mission will keep A. C. of S., G-2, informed of location of mission headquarters.

Concurrences:
ONI (R.E.S.)
OSRD (V.B.)
ASF (R.R.F.)

/s/ Clayton Bissell

CLAYTON BISSELL
Major General
A. C. of S., G-2.

CKG - 11 May 1944
OPD CONCURS

Distribution:
G-2 Member, Advisory Committee
Chief, Theater Group, MIS
Collection Unit, MIS
OPD
ONI
OSRD
CG, ASF
DIR. of Intelligence, ASF
A-2
G-2, Army Ground Forces.
New Developments Division.

Approved
By order of the Secretary of War
Joseph T. McNarney
Deputy Chief of Staff, U. S. Army

/s/ O. L. Nelson

By O. L. Nelson
Brig. Gen., G.S.C., Asst. Deputy Chief of Staff.

SECRET

COPY

OSRD

Office of Field Service
May 15, 1944

TO: Col. C. P. Nicholas, G-2
Room 2E816 Pentagon Building

FROM: S. A. Goudsmit

SUBJECT: Scientific Intelligence

The purpose of Scientific Intelligence is to obtain knowledge about scientific war research in enemy and enemy occupied territory. Its interest is limited to war equipment and methods in early stages of research and development. It does not include information about enemy equipment which is already in use.

In order to achieve this purpose, it is necessary to gather information about the location of research workers in enemy territory. Their geographic distribution may indicate whether they are engaged in war research and how intensily this work is being pursued. The investigation of their whereabouts may also yield some preliminary information concerning the kind of research in which they are engaged.

Scientific Intelligence must also include gathering information about the research laboratories of large industries as well as educational institutions. However, the industries and their products as a whole fall outside the scope of scientific intelligence.

Valuable information can also be revealed by observing certain small industries which specialize in the manufacture of instruments for use in research laboratories. In this way, one learns something about the types of research being followed.

Initial information has to be gathered in the U.S.A. and in neutral countries and supplemented by what is known already in the U.K. Such ground work will lead to an intelligence plan to be followed after our forces occupy enemy held territory and after the enemy's total surrender.

Preliminary Work in the U.S.A.

1. The Office of Scientific Research and Development must, as soon as possible, furnish a description of the principal subjects on which intelligence is required.

2. Research workers and industrialists now in the U.S.A. who formerly had close connections with research in enemy territory must be interrogated with regard to information on the following points:

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E.O. 11652, Sec. 3(E) and 5(D) or (E)
Authority NND 750112
By CD/52 NARS, Date 25 FEB 1976

SECRET

Prewar location of scientists and research programs.
Possible changes since the beginning of the war.
Reliability and loyalty of scientists in occupied territory.
Possible channels for intelligence through colleagues in neutral countries and other suggestions.
Names of colleagues who may possess useful information.

Key foreign scientists now in the U.S.A. who must possess valuable knowledge for Scientific Intelligence are:

Niels Bohr, Dane, Left Compnhagen late in 1943. Now in New York.

Peter Debye, Dutch, worked in Germany until early 1940, held high positions in German scientific organizations in close contact with the Educational Department of the Nazi Government. Now at Cornell University.

Leon Brillouin, French, Held an official government position in charge of radio. Served for a short period with the Vichy Government. Now in Providence, R. I.

Other physists who may give some useful information are:

Debye's son	-	Cornell University
Iskrant	-	C.C.N.Y., left Leipsig July 1942.
O. Oldenberg	-	Harvard University
F. Ladenburg	-	Princeton University
W. Pauli	-	Princeton University
C. Fajans	-	University of Michigan
V. H. Regener	-	University of Chicago

and several others.

Industries to be contacted must include:

Philips Lamp Works (Dutch)
I.T.T.
Dutch Shell, etc.

A complete list for the various sciences can be furnished by the OSRD.

3. Routine investigation of enemy scientific publications will supplement the information obtained from research workers and scientists. In addition it will give information on what types of research are not considered secret; what scientists are not or are only partially engaged in war research; what kind of university courses and research investigations receive special emphasis in enemy territory. A list of such publications must be furnished by the OSRD.

4. The "Harvard Defense Group" is at present engaged in gathering detailed information about scientists in enemy territory. Their data may be of value to scientific Intelligence.

5. Membership lists of enemy and neutral scientific societies will tell which foreign scientist still have connections with enemy organizations. Such lists can be obtained from Libraries and various scientists in the U.S.A. or through neutral countries. Important confirmation or correction of intelligence learned in other ways can be given through these lists. O.S.R.D. must indicate which scientific societies are worth investigating.

6. Government officials of neutral or enemy occupied territories, may also possess knowledge of importance to Scientific Intelligence and should be approached.

Preliminary Work in Neutral Countries

In these countries the Scientific Intelligence must establish contact with research workers and organizations in universities and industries which still maintain connections in enemy and enemy occupied territory.

The preliminary investigations in the U.S.A. will indicate just who should be approached in neutral countries. There will be neutral scientists sympathetic to the Allies as well as German refugees who still communicate with colleagues in enemy territory.

The following is a tentative list of physicists:

Brazil

Dr. Guido Beck, Refugee. Paris around 1938, later in unoccupied France, next Portugal, now somewhere in Brazil.

Argentina

Prof. E. Gaviola, Buenos Aires, porbably leftist.
Prof. Josef Wurschmidt, Tucuman, This name appears on membership list of German Phys. Soc. 1935, Who and what is he?

Turkey

Prof. H. Zahn, Ankara
Prof. F. Dessauer, Istanbul

Eire

Prof. E. Schrodinger, Dublin

Spain

M. Catalan - whereabouts unknown

Portugal

Prof. X -(already in contact with S.A.G.)

Also officials of exiled governments and industries in enemy occupied territory should be approached in neutral countries.

Preliminary Work in U.K.

This work is similar to that in the U.S.A. supplemented by cooperation with British Intelligence sources.

In the U.K. more precise information may be available from exiled governments and contacts with underground movements in occupied countries.

SAG:ske

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WAR DEPARTMENT
The Adjutant General's Office
Washington 25, D. C.

AG 201-Pash, Boris T.
(25 May 44)PO-A

Restricted

WLD/lgp/2416 Mun
Br. 77167

EXTRACT

26 May 1944

Letter Orders for: Lieutenant Colonel Boris T. Pash, 0275706, MI.

1. Directed proceed fr Wash, DC to sta outside US, and such other places as may be nec with approval of CG *** on temp dy for purpose of carrying out instr of ****. Will report to TAG for processing and air T, upon completion of which, WP fr Wash, DC and/or NY, NY to destination, reporting to CG for dy. Upon completion temp dy, will return proper sta, Wash, DC.

2. TDN. 1-5412 P 432-02, 03 A 0425-24. Travel by air fr Wash, DC and/or NY, NY to sta outside US and such other places as nec, and return, dir and nec for accomplishment emerg war mission. Baggage allowance 65 lbs, personal effects, and excess baggage allowance of 15 lbs, official equipment, auth while traveling by aircraft. Lieu subs flat per diem $7.00 auth while traveling on official business and while absent fr perm sta in accordance with existing law and regulations.

3. Auth to draw and carry 1 .38 calibre side arms and ammunition, which is to drawn fr Counter Intelligence Hqs, MDW.

4. Under provisions of Par. 18 b, AR 55-110, appointed Acting T Offr for purpose issuing Govt transportation requests covering travel to be performed under this ord.

5. Auth to wear civilian clothes.

6. Clothing (winter) as prescribed in T/E #21, 15 Dec 43 and changes thereto will be taken.

7. Typhus immunizations will be administered.

8. Provisions of POR apply.

By order of the Secretary of War:

THE ADJUTANT GENERAL'S OFFICE
OFFICIAL
WAR DEPARTMENT

Ben D. Gilletson
Adjutant General.

Restricted

ALLIED FORCE HEADQUARTERS

SECRET

~~S E C R E T~~
HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY

* * * * * * * * * * *
* S E C R E T *
* Auth: CG, ETOUSA *
* Init: *
* Date: 2 June 1944 *
* * * * * * * * * * *

AHCJr/at
APO 887
2 June 1944

AG 300.4 (2 June 44) 67F

Subject: Orders.

To: LT COL BORIS T. PASH, 0275706, MI.

1. The Theater Commander directs as necessary in the military service that LT COL BORIS T. PASH, 0275706, MI, now on temporary duty in this theater, proceed by first available air (Class I Priority) transportation from the United Kingdom to Algiers, North Africa, reporting upon arrival to the Commanding General, NATOUSA, for temporary duty for the purpose of carrying out instructions of the Theater Commander. Upon completion of this duty, LT COL PASH will return by first available air (Class I Priority) transportation to his present station in the United Kingdom. Travel by air from the United Kingdom to Algiers, North Africa and return is necessary for the accomplishment of an emergency war mission.

2. Travel will be performed by military, naval or commercial aircraft, Army or Naval transport, commercial steamship, belligerent vessel or aircraft and rail. A baggage allowance of 65 lbs is authorized while traveling by air.

3. TCNT. TDN. 60-136 A 432-02, 03 A 212/40425.

4. Attention is invited to Section II, WD Circular No. 145, 24 June 1943, regarding the preparation and distribution of extract copies.

5. Auth: AGWAR Cable WARX 42026, 26 May 1944.

A. H. Corley, Jr.
A. H. CORLEY, Jr.,
Lt Col, AGD,
Asst Adjutant General.

DISTRIBUTION:
TAG.....2
CG, NATOUSA.....2
G-2.....7
Lt Col Pash.....(6)
Executive AGO.....1
Priorities & Traffic Off, ATC,
Attn: Capt Wiseman.....3
Officers' Br.....1
Pers Misc Br, AGO.....1

~~S E C R E T~~

DECLASSIFIED 17 vv/81
(see back of document) date

SECRET

AUTHORITY: MEMORANDUM FOR Chief, Office of Industrial Security
Contract Administration Services
Defense Supply Agency (13 Aug 73)

Subject: Hoover Institute Declassification Program

Reviewer: EHM

COPY

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ALLIED FORCE HEADQUARTERS
APO 512

File : AG 201-P-Pash, Boris T. (0) /rr 4 June 1944

SUBJECT : Travel Orders

To : Lt Col. BORIS T. PASH, 0-275706, MIS WD, T/D G-2 Sec, AFHQ

1. You will proceed on the date and to the place (s) indicated below on temporary duty in order to carry out an assigned mission and upon completion return to proper station :

To Naples, Italy, on or about 4 June 1944.

2. Travel by military aircraft, rail and/or surface transportation is authorized.

By command of General WILSON :

R. E. LINES
Captain, AGD
Asst Adj Gen

DISTRIBUTION :

Individual	3
AG 201 File	1
G-4 M & Tn (Air)	1
G-2 Sec, AFHQ	1
Hq AAI	1

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Authority NND 745046
By CW, NARS, Date 12-31-75

DECLASSIFIED 17 Nov 81
(see back of document) date

AUTHORITY: MEMORANDUM FOR
Chief, Office of Industrial Security
Contract Administration Services
Defense Supply Agency (13 Aug 73)
Subject: Hoover Institute Declassification Program
Reviewer: E Hines

ALLIED FORCE HEADQUARTERS
APO 512

File : AG 201-F-Pash, Boris T. (O) 4 June 1944

SUBJECT : Travel Orders

To : Lt Col. BORIS T. PASH, O-27570, MIS, WD, T/D G-2 Sec, AFHQ

1. You will proceed on the date and to the place (s) indicated below on temporary duty in order to carry out an assigned mission and upon completion return to proper station :

To Naples, Italy, on or about 4 June 1944.

2. Travel by military aircraft, rail and/or surface transportation is authorized.

By command of General WILSON :

R. W. LINES
Captain, AGD
Asst Adj Gen

DISTRIBUTION :

Individual	3
AG 201 File	1
G-4 M & Tn (Air)	3 1
G-2 Sec, AFHQ	1
Hq AAI	1

DECLASSIFIED
(See back of document) date
AUTHORITY: MEMORANDUM FOR Chief, Office of Industrial Security
Contract Administration Services
Defense Supply Agency (13 Aug 73)
Subject: Hoover Institute Declassification Program
Reviewer: E Hm

SECRET

COPY

Extract

Memo to: Col. C. P. Nicholas, Chairman Advisory Board.

From ; Dr. Alan T. Waterman, Deputy Chief, Office of Field Service, OSRD

Dated : 10 June 1944

Subject: SIM

Summarizes understanding of Office of Field Service, OSRD, as to responsibilities and procedures of Scientific Chief and Military Chief of mission as stated in memo from A. C. of S., G-2, to Chief of Staff, dated 1 April 1944.

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By CD/SR NARS, Date 25 FEB 1976

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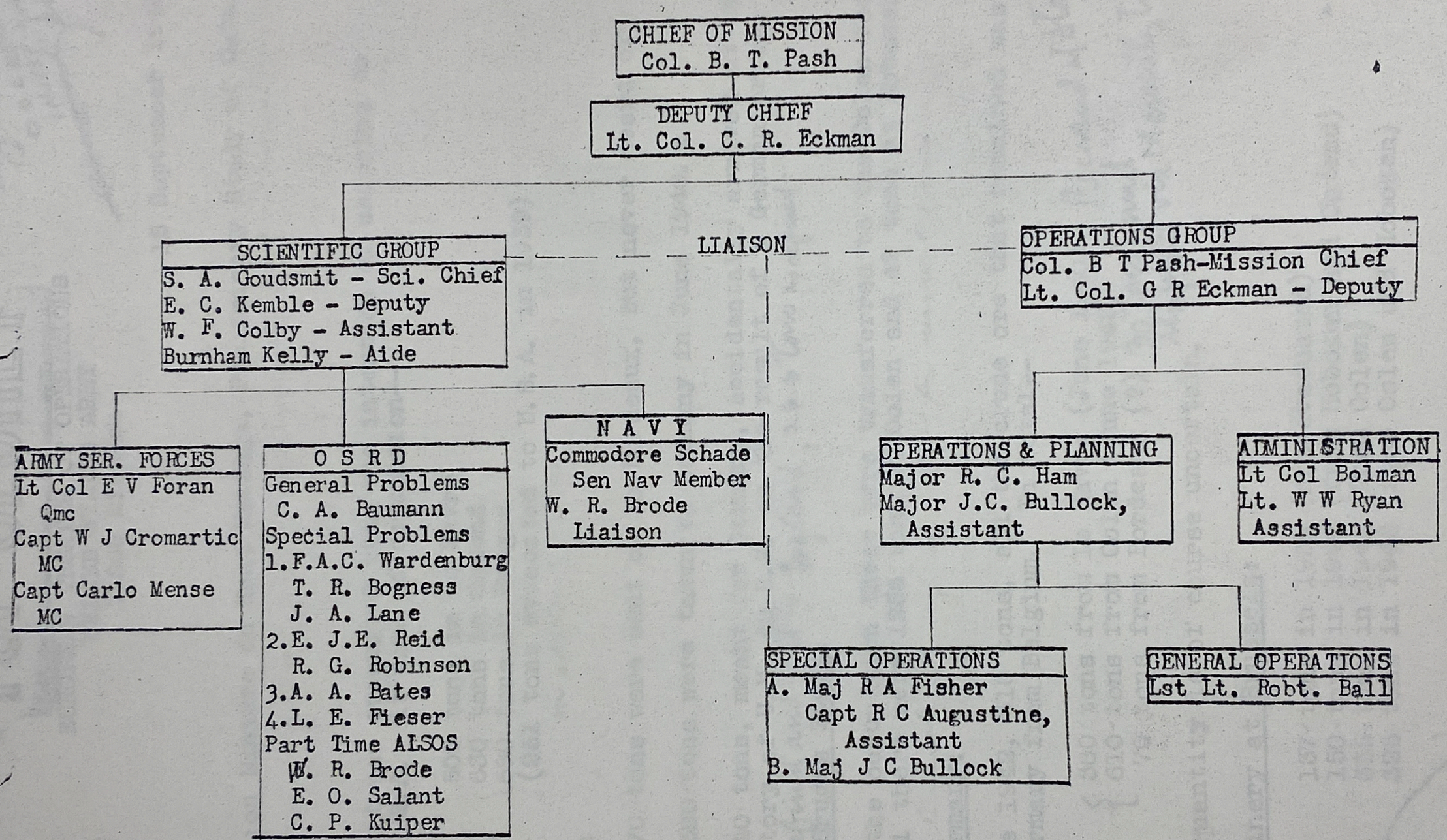
Cpl Nathaniel W. Leonard (CIC)	Aachen
Pfc Robert M. Peese (CIC)	Aachen

Note: Thirty-three (33) additional enlisted personnel have been procured in this country and are now enroute to Paris for duty with the ALSOS Mission.

DISTRIBUTION:
Deputy A. C. of S., G-2
Chief, MIS
Colonel Nicholas (G-2)
Colonel Gruhn (ASF)
Lt. Comdr. Old (Navy)
Dr. A. T. Waterman (OSRD)

MISSION OPERATIONAL CHART - 17 March 1945



TOP SECRET

Belgium
OOLEN INVESTIGATION

EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

16 September 1944

SUBJECT: Union Miniere du Haut Katanga, Preliminary Study of Data.

Crude Ore:

All of it was evacuated with the intention of shipping to England or U.S.A. At time of occupation--

500 tons in Le Havre
630 tons in Ostend
680 tons in Bruges
(251 tons evacuated to U.S.A. in 1939)

Havre Stock:

About 70 tons were sent on to Bordeaux, but never heard of again.

About 380 tons were taken to Germany in June 1940.

About 40 tons, meant for Germany, accidentally arrived at the Hoboken factory of U.M. du H.K. as the result of a German error.

Ostend and Bruges Stock:

After the occupation these were transferred to the Oolen factory. In June 1941 there were 1236 tons at Oolen and 42 tons at Hoboken.

Taken to Germany:

In June 1942, 610 tons, all the crude ore that remained was taken to Germany from Belgium. In total--

380 tons from Le Havre (June 1940)
610 tons from Oolen (June 1942)
70 tons from Bordeaux (?)

The latter quantity is of course uncertain.

Sent to Refinery at Brussels:

137 tons in 1939 (not evacuated)
150 tons in 1940 (from Hoboken and Ostend)
335 tons in 1941 (From Oolen)
325 tons in 1942 (from Oolen and Hoboken)

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Union Miniere du Haut Katanga - Cont'd 15 Sept. 1944

No crude ores remained in the possession of the U.M. du H.K.

The Germans paid prewar prices for all the material, except the booty found in France.

(Note that this ore is a "wet" product and that thus the amounts need not add up to the original value. Quantities are in round numbers in metric tons of 2200 pounds).

Rejects: (Impure)

All stocks were taken to Germany in June 1942, with the exception of 25 tons of "uranium residues" which were sent to Brussels for refining in 1941 up to June 1942.

Removed to Germany:

Ferro-uranium	17 tons	(40% U-metal)
Residues	53 tons	(30% U_3O_8)
Uranyl carbonate	44 tons	(40% U_3O_8)
Black Oxyde	4 tons	(90% U_3O_8)
Sodium Uranate	8 tons	(70% U_3O_8)

Finished Products:

On 8 September 1944 the data indicated that there remained in Belgium about 45 tons of ammonium uranate, 2.5 tons of black oxide and about 10 tons of other products. Part of this was ready for shipment but probably has not been removed yet.

This, at present, seems to be all that is left in Belgium. However, a further detailed check must be made as soon as the factory at Oolen becomes available.

Details of movements of refined products as well as precise data on crude ore are given on the data sheets prepared by the U.M. du H.K.

Summary:

Indicating only the principal movements we find--

Summer 1940	- 11 tons oxyde to Auer	380 tons crude to ?
Fall 1940	- 44 tons oxyde to Auer	70 tons crude lost ?
1941	- no large movements	
Summer 1942	- 120 tons finished pr. to Roges	
	610 tons crude to Roges	
	125 tons rejects to Roges	
Summer 1943	- 50 tons finished pr. to Roges	
Winter 1943	- 40 tons finished pr. to Roges	

* * * * * *

S.A.G.

DR. S. A. GOUDSMIT
Scientific Chief

TOP SECRET

TOP SECRET

EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

15 September 1944

SUBJECT: German Recepients of Uranium Products from Belgium.

Several firms received small amounts apparently for normal peace time applications or retrade. The quantities being usually less than one ton of assorted refined material per month.

From June 1940 until August 1941 the Auer Gesellschaft, who never was a customer before the war, suddenly became a large consumer, a total of roughly 60 tons of refined materials over this period. The last two shipments to this firm were in July and August 1941 and were ten tons each.

The engineer at Auer Gesellschaft who was apparently in charge of uranium ore purchases was Dr. Ihwe. He visited Belgium in October 1940.

The next large shipment was in November 1941 of about nine tons to the Deutsche Gold und Silber Scheide Anstalt, who was a prewar customer for amounts of about two tons. This shipment may therefore have no special significance.

Suddenly in June 1942 unusually large amounts were requisitioned and sent to Roges, m.b.H., namely about 115 tons of assorted refined and half refined materials. In addition, they obtained 610 tons of crude material, 17 tons of ferro-uranium and about 110 tons of impure products designated as "produits non-marchands" that is "rejects". Also in Jan 43, 50 tons and in May 80 tons of refined products.

115
610
17
110
50
80

Roges m.b.H. is a war created trading office most likely directly connected with the German ministry of trade and Finance (Handels und Finanzministerium). Its full name is Rohstoff Handels Gesellschaft m.b.H (-Raw materials trade company Ltd.) and probably supervised the trade of all metallic ores.

The man in charge of uranium ores was Dr. Faust

The company was bombed out at least twice and requested new copies of their records from Belgium. An old address was:

Tirpitz Ufer 2024, Berlin W9

the latest address is probably:

Chaussee Strasse 6 - 10
Berlin - Mariendorf
Phones 70.03.31, 75.64.06 and
75.66.31 (long distance)

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By PH NARS, Date 5/24/76

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German Recepients of Uranium Products from Belgium- -15 Sept 44

Reported by: Mr. Gaston André in charge of uranium at the main office of the Union Miniere du Haut Katanga, Brussels. Interviewed September 10-14, 1944.

(Quantities in this report are only approximate and in metric tons.)

S.A.G.

DR. S. A. GOUDSMIT
Scientific Chief

TOP SECRET

~~SECRET~~

15 August 1944

Summary of Information

Bisingen area was photographed. Pictures were reviewed. Nothing suspicious in this area in the way of war plants was discovered.

(Cable from Calvert - 12 August 1944)

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By CD/SR NARS, Date 25 FEB 1975

~~SECRET~~

14 August 1944

Ask Kuhn concerning his Kiel work on centrifuges published in Zeitschrift für Physikalische Chemie (A) Vol. 189, page 219, 1941, Subject, Multiple Processes for the Separation of Gas Mixtures Especially by the Application of Gravitation of Fields. Were there any experimental results? Were any machines built to confirm the results? By whom?

This question to be asked only by one scientifically competent and sympathetic who has read the article. Such a person could ask many other relevant questions concerning the interest of the authors in writing the article, as well as the interest of others who have contacted the author since the article was written.

OSS cable Aug 21st
H/Bern

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Authority NND ~~750120~~ 750065
By CO/SR NARS, Date 25 FEB 1976

2 3 A

12 August 1944

Summary of Information

Swiss Scientist, Dr. Walter Dällenbach, said to be experimenting with a new form of high explosive nearing completion, of which the smallest quantity has devastating effects.

He is collaborating with a German named Binch at Kaiser Wilhelm Institute, Berlin which has apparently been destroyed in recent raids.

Above mentioned is continuing experiment in a disused weaving mill at Bisingen.

The above information has obtained through a Swiss intermediary who knows Dällenbach's family.

(Perrin- Zurich contact - 18 Sept. 1943)

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By CO/SR NARS, Date 25 FEB 1976

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3 SERIES

21 July 1944

~~SECRET~~

Summary of Information

1. Air reconnaissance of Schoenficht shows no sign of mine working.

2. Swedish physicists had an interview with Professor Gentner, said he was working with cyclotron at the KWI at Heidelberg. Professor Bothe was at Heidelberg.

3. Gentner stated that the KWI at Berlin-Dahlem was damaged by bombings but the laboratories are still operating under the direction of Professor Hahn. The Institutes at Cologne, Leipzig and Munich were seriously damaged but every institution now has reserve laboratories in the country. The Heisenberg Institute, for instance, is at Bisingen and has a cyclotron. Retzler and Maurer have joined Joliot and are working with the Paris cyclotron.

4. The Reichs Postal Administration under the direction of Pose have installed three high tension laboratories which are under the direction of Flügge and Von Ardenne.

5. It has been proposed that the Nils Bohr Institute at Copenhagen be transferred to Germany. Heisenberg has refused to take charge if this is done.

(Londoncable 6/10 - ltr fr Dix 6/10)

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32. 7003-2 GERMANY
US Wartime Positive Int.
July-Oct. 44

SPECIAL ORDERS)
:
Number 225)

R-E-S-T-R-I-C-T-E-D
HEADQUARTERS
MILITARY INTELLIGENCE SERVICE
EUROPEAN THEATER OF OPERATIONS
U S ARMY APO 887

File - 201 - Pash

21 August 1944

E X T R A C T
* * * * * * *

18. Lt Col BORIS T. PASH 0275706 Inf, atchd Mil Int Sv, European T of Opns USA, APO 887, is placed on DS w/Fwd Ech Com Z, APO 350. WP Fwd Ech Com Z, reporting upon arrival to AC of S, G-2 thereof. Lt Col PASH is atzd to travel to such additional places in the combat or communications zones as may be necessary in performance of his mission. TCNT. TDN. 60-136, 114 P 432-02 A 212/50425.

* * * * * * *

By order of Colonel DOYLE:

OFFICIAL:

R. M. Work
W. M. WORK
Captain CE
Adjutant

GEORGE DANKER
Lt. Col., Inf
Executive

R-E-S-T-R-I-C-T-E-D

SPECIAL ORDERS)
:
Number 225)

R-E-S-T-R-I-C-T-E-D
HEADQUARTERS
MILITARY INTELLIGENCE SERVICE
EUROPEAN THEATER OF OPERATIONS
U S ARMY APO 887

21 August 1944

E X T R A C T
* * * * * * *

18. Lt Col BORIS T. PASH 0275706 Inf, atchd Mil Int Sv, European T of Opns USA, APO 887, is placed on DS w/Fwd Ech Com Z, APO 350. WP Fwd Ech Com Z, reporting upon arrival to AC of S, G-2 thereof. Lt Col PASH is atzd to travel to such additional places in the combat or communications zones as may be necessary in performance of his mission. TCNT. TDN. 60-136, 114 P 432-02 A 212/50425.

* * * * * * *

By order of Colonel DOYLE:

OFFICIAL:

R. M. Work
WORK

GEORGE DANKER
Lt. Col., Inf
Executive

~~SECRET~~

SERIAL NO. 365

SHAEF AIR MOVEMENT PERMIT
(See instructions on reverse side)

DECLASSIFIED 17 xx/81 (see back of document) date

Section A (To be completed by Authorizing Agency)
Authorizing Agency to prefix Serial No.

Passenger 0275706, LT COL, PASH, BORIS T.
(State personal number, rank, name and initials, in BLOCK LETTERS)

Branch (Officers) or Trade (Airmen) (RAF only) Inf

Unit, Formation or Organization MI Sv, Hq European T of Opns US Army

Air Passage required from London to Continent

Date passage required 22-8-44

Reason for movement Carry out instructions of Theater Commander.

Authority for movement Ltr O, Hq European T of Opns, USA, 21 Aug 1944
(State reference of signal or other authority) Priority grading II

Name and Address of Sponsoring Authority: AG, Hq European T of Opns, US Army, APO 887

Date 21 August 1944

Name R. B. LOVETT, Brigadier General, USA.

Address Adjutant General.
(Authorizing Agency)

STAMP: Military Permit Office (Required by civilians proceeding from U.K.)

~~SECRET~~

Section B. (To be completed by Air Traffic Office)

To:- (Sponsoring Authority) AG, Hq European T of Opns, US Army, APO 887

The passenger named in Section A emplaned en route for _____ (final destination) at the undermentioned station on Aircraft _____ which departed _____ 194

_____ Rank
(Signature of officer completing Section B)

_____
(Unit Stamp and Date)

~~SECRET~~

Section C. (To be completed by O.C. station of arrival and forwarded to Sponsoring Authority)

To:- (Sponsoring Authority AG, Hq European T of Opns, US Army, APO 887

The above-named arrived at this station on the date stated below.

_____ Rank
(Signature of Officer completing Section C)

_____
(Unit Stamp and Date)

AUTHORITY: MEMORANDUM FOR Chief, Office of Industrial Security
Contract Administration Services
Defense Supply Agency (DSA Aug 73)

Subject: Hoover Institute Declassification Program

Reviewer: E Hom

~~CONFIDENTIAL~~

Hq European T of Opns USA

DCG/jrp
APO 887
21 Aug 1944

AG 300.4 (21 Aug 1944) 978H

CONFIDENTIAL

Subject: Orders.

To: LT COL BORIS T. PASH, 0275706, Inf.

1. LT COL BORIS T. PASH, 0275706, Inf, attached to Hq MI Sv, European T of Opns USA, will proceed on or about 21 Aug 1944, from his present station in the United Kingdom to such points within the combat zone in Northwestern Europe, on temporary duty, as may be necessary to carry out the verbal instructions of the Commanding General, Com Z, European T of Opns USA, and, upon completion of this duty, will return to his proper station. LT COL PASH will report to the Commanding General, Com Z, European T of Opns USA (Fwd) upon arrival.

2. Travel will be performed by military, naval or commercial aircraft, surface transportation, Government motor vehicle and/or rail. If travel is performed by surface transportation, LT COL PASH will report to the Port Commander, Southampton, for necessary transportation.

3. Reimbursement, not to exceed four dollars ($4.00) per day for quarters and an allowance of one dollar and twenty five cents ($1.25) per day for subsistence, is authorized LT COL PASH while traveling within the United Kingdom and while in the United Kingdom.

4. The officer named above is a member of the Allied Expeditionary Force.

5. TCNT. TDN. 60-136, 114 P 432-02 A 212/50425.

By command of General EISENHOWER.

DISTRIBUTION:
CG, Com Z, European T of Opns USA (Fwd).....1
MI Sv, European T of Opns USA...5
Lt Col Pash.....(4)
Officers Branch.....1
Pers Misc Br, AGO.....1 6

Donald C. Gallup
DONALD C. GALLUP,
Major, AGD,
Asst Adjutant General.

~~CONFIDENTIAL~~

CONFIDENTIAL

DECLASSIFIED 12/22/81
(see back of document) date

MEMORANDUM FOR Chief, Office of Industrial Security
Contract Administration Services
Defense Supply Agency (13 Aug 73)
Hoover Institute Declassification Program

Subject:

Reviewer: Ethm

R E S T R I C T E D
HQ ETOUSA

AG 300.4 (2 June 44) 67F

AHCJr/at
APO 887
2 June 1944

Subject: Orders.

To: LT COL BORIS T. PASH, 0275706, MI.

E X T R A C T

This is to certify that LT COL BORIS T. PASH, 0275706, MI, has been ordered to proceed to North Africa and return. The following is an extract of his orders which are dated 2 June 1944.

* * *

2. Travel will be performed by military, naval or commercial aircraft, Army or Naval transport, commercial steamship, belligerent vessel or aircraft and rail. A baggage allowance of 65 lbs is authorized while traveling by air.
3. TCNT. TDN. 80-136 P 432-02, 03 A 212/40425.

* * *

A. H. Corley Jr.
A. H. CORLEY, Jr.,
Lt Col, AGD,
Asst Adjutant General.

R E S T R I C T E D

Hq T Force
Near Rambouillet
24 Aug '44

Lt Col BT Pash Inf,
Comdg ALSOS Mission,
a component of "T"
Force 12th Army Gr.
is authorized to
proceed on his special
mission under subject
to the tactical situation.

T-P Thompkins
Col GSC
Comdg T Force

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UNITED STATES ARMY
ALSOS MISSION

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COPY

31 August 1944

Second interview with "J" , Paris, 30 August 1944.

SUMMARY: No important information, except for some more details or names.

REPORT: Military visitors to the laboratory of "J".

General Schumann, Chief of Army Scientific research, physicist interested in theory of music.

Bieder, his Deputy, formerly professor of musicology at Heidelberg.

Diebner, his scientific expert. Physicist with thorough knowledge of TA. See first interview for details. Returned to Paris frequently.

Scientific visitors:

Gentner, definitely anti-Nazi.

Dänzer, circuit man.

Hartvig, astrophysicist.

The above scientists arrived soon after the occupation and stayed for about one year, being replaced by the following:

Bagge, pupil of Heisenberg, stayed for about six months in 1942. Interested in cosmic radiation only.

Maurer, second rate physicist, liked by nobody. Gentner returned especially to Paris to warn J against him. Maurer stayed until the very end.

Riezler, physicist, anti-Nazi, left in May 1944.

Rackwitz, a technician.

J had the impression that these men came to Paris only to hide or rest. They did little work and certainly no war work of any kind.

Bothe was an occasional visitor, who was more or less in charge of the men sent to Paris.

Abraham Essau, the present director of the PTR (German Bureau of Standards) visited in 1943.

Von Weizsäcker gave a lecture in Paris, which wasboycotted by the French as was a luncheon in his honor. J talked to him, but not on physics, merely about the bad tasts of accepting a lecture engagment in Paris, to which Von Wäizsacker answered that he had been forced to accept. J believes Von W to be anti-Nazi and trustworthy.

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Hahn had been asked by the Germans to go to Paris, but he refused "not wishing to confront J as victor". J wondered why von W. couldnt have refused too.

Gerlach was met by J in Paris in April 1944. He did not visit J's laboratory, it was a chance encounter.

The net result is that J has no factual clues at all which might give information on German TA work. His personal opinion is that little or no war work is done by scientists in Germany, it is all done by specialists of the type of industrial engineers.

The Germans never asked J to perform specific experiments or measurements. He was free to do his own work.

S. A. GOUDSMIT
Scientific Chief.

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EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS MISSION

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~~SECRET~~

31 August 1944.

Interview with "F.J", Paris, Tuesday, 28 August 1944.

SUMMARY

"F.J"'s information confirmed that obtained from other French contacts in New York. No additional information of real value was obtained. Only additional detail.

REPORT

The principal interest in TA occurred at the beginning of the occupation of France. "J" himself had been interested in the TA problem. He had realized the potentialities. He had sent the stock of heavy water to England, eight tons of uranium oxide to Morocco and two of his men "K" and "V.H." to England to continue work on TA. Attempts were made to save the stock pile of uranium ore at Oolen near Antwerp. Part of the freight cars on which it was loaded were discovered near Le Havre. The trail of the rest was lost and all of it was probably taken to Germany.

"J" was interrogated at length by a German army man named DIEBNER, physicist once co-worker of Pose. He had evidentally studied in great detail all of "J"'s official government contacts which might have had a bearing on TA. This information he got from captured files from French Intelligence. DIEBNER acted very authoratively and seemed to have a thorough knowledge of the TA problem. He made several visits to "J"'s laboratory, arriving unexpectedly from Germany. His last visit occurred about the middle of 1943. If the Germans do any work on TA, "J" expects DIEBNER to be a key man in the administrative set up. DIEBNER is in the Department of a General SCHUMANN, who is chief of the scientific service of the German army. He is a physicist interested in the theory of music and musical instruments and he also visited "J".

"J" insists that no war work or any related to TA was done by Germans visiting his laboratory. Gentner was definitely anti-Nazi and so were Maurer and Retzler. They gave warning to French acquaintances who were being investigated by the Gestapo. They were friendly and talkative and would certainly have dropped clues about German TA work if they had known about it.

A hostile visitor was BOTHE. "J" had the impression that he knew a lot.

All the above information was obtained already from other sources with the exception of the name and the description of the key man DIEBNER.

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"J" believes that the group of Germans who worked in his laboratory are not now actively engaged on TA work. If such work is going on, it is probably being done under DIEBNER and BOTHE. However, "J" does not believe that Germans have done any serious TA work. He believes that the original interest was to make sure that "J" himself had not made a real progress on TA. "J" admitted that some German publications indicate that TA work was of interest to the Germans. In that respect, he mentioned publications by STARKE on organic uranium compounds.

It is evident that "J"'s meager knowledge extends primarily over the early period of the occupation. His contact with the Germans in his laboratory has not been close, he convinced himself that they didn't engage in war research. With time "J"'s interest and alertness concerning TA seems to have faded, probably influenced by a preconceived notion that the Germans were unable to solve the problems involved.

"J" believes that those German colleagues who might have worked on TA with some success were primarily anti-Nazi, such was the attitude of the men who worked in his laboratory. He has also the prejudiced opinion that no good scientist can work successfully on such a vital problem if exclusively destructive aims are considered. These weren't exactly his words, he definitely believes in doing war work on things like explosives or radar, but he appears to have some special idealistic view of the TA problem. His basic interest in it is its use as a super source of energy, not as an explosive.

"J" also pointed out that so many German Scientists were still doing pure research. He stated that the Germans had singled out pure scientists and also artists to continue in their peace time work, probably to be sure to be ahead of the rest of the world after the war, even in case of German defeat. "J" mentioned that there had been a German artist colony somewhere in France.

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EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

OSRD
Office of Field Service
SEP 21 1944
Received
Referred to:

7 September 1944

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EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

Office of Field Service
Received SEP 20 1944
Referred to:

1 September 1944

SUBJECT: Progress Report - Alsos Mission - France No. 1

TO : Chief, Military Intelligence Service, War Department, Room 2C715, The Pentagon, Washington, D.C.

1. Pursuant to instructions from Assistant Chief of Staff, G-2, 8th Army Corps, Lt. Col. Boris T. Pash and Agent Beatson reported to the headquarters of the 8th Army Corps on 9 August 1944 for the purpose of carrying out the instructions of the War Department to enter l'Arcouest and secure Professor Joliot if he were found there, or, in his absence, any documents which may be found in his house.

2. The Assistant Chief of Staff, G-2, 8th Army Corps, attached the above party to General Ernest's Task Force "A", which had the assignment of reducing German resistance at Paimpol and vicinity, which included l'Arcouest. The headquarters of Task Force "A" was reached on the morning of 10 August, and the Mission made known to the Commanding General. General Ernest gave all possible assistance and when the operation was sufficiently advanced to permit the leading element of the Task Force to operate in the vicinity of l'Arcouest, Colonel Pash and Agent Beatson joined that unit. l'Arcouest was entered in the middle of the morning of 11 August, and through questioning of local inhabitants, the houses of Professors Joliot, Auger and Perrin were spotted. Maps secured from German sources and reports of local inhabitants all led to the conclusion that the area around these houses were heavily mined. In view of the time element involved, it was considered advisable to try to go through to one of the houses to determine its condition. Professor Perrin's house was selected for this purpose. Previous attempts by French patriots to gain access to this area resulted in the death of seven of their force.

3. In view of the inavailability of engineer units, Agent Beatson preceeded the party through the reportedly mined area. The house of Professor Perrin was reached in safety and found to be totally cleared of all furniture and personal effects and the structure itself left in a very poor and dirty condition. Upon departing from the house, the party came under fire and any further attempts to enter the house of Professor Joliot, which was closer to the German positions, was abandoned.

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EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

OSRD
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Received SEP 21 1944
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KT
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LTR
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7 September 1944

SUBJECT: Progress Report - Alsos Mission - France No. 2

SECRET

Progress Report - Continued 1 September 1944

4. At 1630 hours the German unit finally surrendered and the fort entered by a group of officers, to which Colonel Pash and Agent Beatson were attached. Examination was made of the fort to determine if any papers could have been taken from the houses of subjects and kept at the fort. However, it was found that ~~if~~ any papers which might have been at the fort were destroyed previously by the Germans.

5. In view of the lateness of the hour and the danger of mines, Professor Joliot's house was not entered that evening. The next morning an attempt was made to secure engineers to clear the way to Professor Joliot's house. Again failing to do so, the party went to the house without the aid of engineers and successfully entered the place. The same conditions were found here as at the home of Perrin. Upon completing this operation, a verbal report was sent to Assistant Chief of Staff, G-2, 8th Army Corps, through an officer, with the request that General Ernest be informed of the results of the operation.

6. While the results obtained were negative, the highly successful manner in which the operation was performed was due to the extremely fine cooperation and assistance of General Sibert, Assistant Chief of Staff, 12th Army Group, Colonel Reeves, Assistant Chief of Staff, G-2, 8th Army Corps, and particularly General Ernest, Commanding General, Task Force "A", who put at the disposal of the Mission any facilities which were requested.

7. Upon completion of the above operation, it was decided to proceed to Rennes in order to make arrangements for the scientific group to base there pending the fall of Paris. Colonel Perry, Assistant Chief of Staff, G-2, Base Section One at Rennes, was contacted and the general purpose of the Mission explained to him. It was determined that the operating route of the Mission consisting of Lt. Col. Boris T. Pash and CIC Agents, should join the "T" Force while the scientific groups would remain at Rennes and upon the fall of Paris the group would move forward. After making the arrangements for billetting and rationing of the Group, Col. Pash and Agent Beatson returned to Communication Zone at Valognes.

/s/ Boris T. Pash

BORIS T. PASH
Lt Col, MI
Chief of Mission

Distribution:
A. C. of S., G-2
Chief, MIS
Colonel Nicholas,
Dr. Waterman (OSRD)
Dir. of Intel., ASF
Commander Old (Navy).

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EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

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Received SEP 21 1944
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7 September 1944

SUBJECT: Progress Report - Alsos Mission - France No. 2

TO : Chief, Military Intelligence Service, War Department, Room 2C715, The Pentagon, Washington, D. C.

1. On Saturday, 19 August 1944, Lt. Col. Boris T. Pash flew to London to discuss with the technical group future plans of operation. Upon arrival at London, it was found that the entire group with the exception of Colonel Eckman, had proceeded to the marshalling area and were ready for embarkation to France. After conference with Col. Eckman on future plans, Col. Pash returned to Valognes to the Communication Zone headquarters in France, where arrangements were made to procure one jeep in addition to one already furnished by Col. S. A. Daniels, Ordnance Section, SOS. The cooperation of Col. Daniels in making available these vehicles was responsible for the future success of the Mission inasmuch as without these vehicles it would have been impossible to act.

2. An advance party of the Mission, consisting of Colonel Pash, Major H. K. Calvert, Agent Gerald Beatson and Pfc Nathaniel Leonard, proceeded to Rennes and then on to Advance Section, Com Z. At Valognes and Rennes instructions were left for the entire group. At this point, the best available information from G-2 indicated that Paris was expected to fall during the first week of September and not before. In view of lack of communications with the main group, plans were made accordingly. After remaining in Rennes about two hours, the party departed for Le Mans. A stop was made at Laval where the G-2 Forward Echelon, 12th Army Group, was contacted. From him it was learned that Paris would probably be entered on the 24th August and that the "T" Force was in the field, bivouaced at Chateau Neuf. It was decided to proceed as far as possible that night and the party left Laval at 2030 hours. At 0100 hours 24 August Le Mans was reached and the group slept in the motor park until 0400 hours, at which time the entire party left for Chateau Neuf to contact "T" Force. After locating "T" Force in the vicinity of Chateau Neuf. Colonel Pash reported to the commanding officer of the Force at Rambuoillet. After a conference with Colonel Tompkins, the commanding officer of "T" Force, it was determined that the best

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plan for the advance party of the Alsos Mission was to proceed from Rambouillet to Orsay on Highway 188 and attach itself to the 38th Cavalry Troop, which had the assignment to break through Palaiseau and proceed on to Paris. After spending an afternoon with the leading elements of the 38th Cavalry it was obvious that they would not reach Paris before the next day. The advance group then proceeded from Highway 188 to Highway 20 in the vicinity of Longjumeau where the 2nd French Armored Division was encountered. At 0855 hours, 25 August, the advance party of the Alsos Mission entered Paris with the leading elements of the 2nd French Armored Division and remained with that Division until well into the city. No attempt was made at this time to proceed to the target because the entire column was pinned down by heavy sniper fire. However, in view of the fact that information received from Antony indicated that the primary target of the Mission was probably located at the College de France. Two attempts were made to get through to the College. Both attempts failed because of heavy sniper fire and the activities of the Germans still remaining in the Jardin du Luxembourg. The party then returned to the headquarters of the forces in Paris established at Mont Paranes railroad station, where an attempt was made to secure two army vehicles. Failure to secure these vehicles resulted in a decision for the advance party to get through to the objective. This was accomplished at 1645 hours on 25 August 1944.

/s/ R. W. Blake, Capt.

for BORIS T. PASH
Lt. Col., MI
Chief of Mission

MIS Hist
Mr Waterman
ab RD

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HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission
APO 887

file

28 December 1944

SUBJECT: Transmittal of Report - TA - by Mr. F. A. C. Wardenburg.

TO : Major R. R. Furman, Room 5119, New War Building, Washington, D. C.

1. Transmitted herewith is a translation of a circular letter from Professor Dr. E. G. Steinke, Director of the Physics Institute, Freiburg University, addressed to Weizsaecker, dated 29 July 1944.

2. At Dr. Goudsmit's request, it is suggested that Dr. R. C. Tolman of the N. D. R. C. be furnished one set of this report.

For the Chief of Mission:

GEORGE R. ECKMAN
Lt Col, MI
Deputy Chief

1 Incl:
Translation

extra copy cover letter destroyed - 19 Mar 1945 /ESL

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HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission
APO 887

28 December 1944

Subject: TA - von Weizsaecker.

To: Major R. R. Furman, Room 5119, New War Building, Washington, D. C.

1. Under date of 29 July 1944 Professor Dr. E. G. Steinke, Director of the Physics Institute, Freiburg University, addressed a circular letter to a number of scientists of which von Weizsaecker was one. In this letter he advised that Gerlach, Reichsmarshal's Deputy for Nucleur Physics, intended to get together some of the workers in the field of cosmic rays and had charged him with the task of securing information on certain points from men known to have been working in the field. The following seven questions were asked:

(1) Are measurements or work in this field going on there?
(2) Are you interested in the furtherance of work in this field?
(3) What work has been completed and published since about 1939?
(4) What special apparatus and material for work in this field are available?
(5) Which branch of cosmic ray development is most interesting?
(6) Are continuous measurement and measurements of oscillation interesting and possible?
(7) Would you like to have a conference of persons working in this field, and would September or October suit you better?

2. von Weizsaecker's reply of 7 August 1944 is as follows:

(1) We are busy at the moment as related work with the theory of slow neutron generation (?) (Mesonenerzeugung) and the primary components of cosmic rays.

meson formation R.C.T

(3) Since 1939 no published work on cosmic rays.

(4) Only theoretical work.

(5) Theory of the elementary processes.

(7) I will be very glad to attend a conference and as far as I can see the end of September would suit me best.

F. A. C. WARDENBURG
Expert Consultant.

Incl

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HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission
APO 887

28 December 1944

Subject: TA - R. Fleischmann.

To: Major R. R. Furman, Room 5119, New War Building, Washington, D. C.

1. In report dated 22 December 1944 under the above subject there was attached translation of Fleischmann's notes on his trip to Berlin in June 1942, to obtain support for a cyclotron for Strassburg. These notes covered a visit to Dr. Schieber, Munitionsministerium, Rustungslieferungsamt. Reference was made to the fact that Fleischmann's letters had reached him only on the day of the visit, namely, 1 June.

2. Another document has been found in Fleischmann's files which is undated but which is believed to have accompanied the letter referred to in these notes. This document is entitled, "The Physics of the Atom Nucleus and the Prospects for its Practical Application", and a translation is attached hereto.

F. A. C. WARDENBURG
Expert Consultant

1 Incl:
Translation

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TRANSLATION

The Physics of the Atom Nucleus and the Prospects for its Practical Application.

Paper by Heischman

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The physics of atom nucleus is a field of physics which has undergone, since about 1930, a surprisingly rapid and fruitful development. In addition to the appearance of natural radio-activity (radium, thorium, mesothorium, etc.) known for 30 to 40 years, the following belong to this field:

Artificial Transformation of the Atom Nucleus (popularly referred to as "Atom Smashing").

Artificially Radio-Active Atoms (discovered since 1934).

These materials can give off particle emissions and wave radiations, i. e. electrons, positrons, gamma rays or Roentgen-K rays. In the course of time they commonly change with loss of radiation intensity into stable atoms. This intensity is reduced to half after a time called the "half-life" for radio-active atoms. Example: Radio-active sodium as radio-active common salt, half-life 15 hours.

Neutrons (discovered in 1932). Neutrons are particles with a size and mass almost identical with the atomic nucleus of hydrogen, the only difference being that the neutron has no electrical charge.

Isotope Separation. Many chemical elements are mixtures of atoms with different atomic weights. These atoms are called isotopes. The chemical properties of these isotopes are so extremely similar that only recently and in the case of a few elements has a partial separation been achieved by chemical means. By physical methods, particularly with the so called mass-spectograph, isotopes are rather easily identified.

Physics of the atom nucleus opens a variety of applications of great importance, perhaps even of great significance in the energy economy.

In this direction the uranium machine is outstanding, the possibility of which was discussed for the first time in 1939, shortly before the beginning of the war, as a result of a discovery by Professor O. Hahn, Berlin-Dahlem, in January 1939. Publications on this matter have apparently been prohibited since the beginning of the war in all countries, and particularly in the United States long before that country's entry into the war.

Principal. When a neutron meets an atom of the chemical element uranium, the following process is possible: The neutron remains in the nucleus of the atom; this breaks asunder almost immediately with tremendous kinetic energy. Two fission pieces result, whose order of size is almost half that of a uranium atom nucleus, and in addition several neutrons whose number is not yet exactly known. When it is possible to absorb these neutrons again in

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uranium and to bring about the fission of each bombarded atom and therefore a new neutron emission the number of neutrons increases and the number of energy delivering fission processes is continued.

The principal difficulty for the construction of such a device for the delivery of energy consists in the fact that:

(1) There is no containing material that is impervious to neutrons and that;

(2) Neutrons can be absorbed by almost all other materials and thus - in case other absorbing materials are present as impurities - are lost for the fission process;

(3) That uranium neutrons of a certain velocity also have a tendency to be absorbed without fission resulting. It must be arranged that neutrons of this velocity appear only in the smallest possible numbers.

With the help of uranium it seems to be possible to make the tremendous energy of the atom nucleus useful for the energy economy. In this case, uranium would assume the character of an important raw material. At the present time our principal sources of energy are:

(1) Water Power (i. e. converted energy of the sun).

(2) Coal (sufficient for only a few centuries and urgently needed for other chemical processes).

(3) The uranium machine would be added.

Large uranium deposits are located in Morogoro and Katanga (Belgian Congo) and in the vicinity of the Great Bering Sea in Northern Canada. Small uranium resources in the Sudetenland (Joachimstahl) are almost completely used up.

The question whether the uranium machine will work is about as follows: (details are secret).

Experiments to date make it seem very probable that the uranium machine will work. Its principal advantage will be that the "fuel" will be consumed only very slowly. Thus for example, it will be possible to give a ship equipped with it, a very great cruising radius. It is to be assumed that it will be possible to control the energy delivering reaction and to prevent a too rapid rate of energy production. At the moment, it seems less likely that the uranium machine can be used as an effective bomb.

Another important possible use of nucleur physics is in artificially radio-active materials, also isotopes of the different chemical elements that possess the property of becoming radio-active, that is, to emit beta and gamma rays. They will be useful in biology and medicine in experiments on changes in materials and examination of bodily functions.

When artificially radio-active isotopes of chemical elements are introduced into plant, animal or human organisms, they can be easily distinguished because of their radiation from the non-radio-active atoms of the same elements already present in the organisms. They are thus, as it were, marked because of their radiation. However, their location can be easily determined and followed often even without chemical analysis or interference. For example: the progress of a capsule soluble only in the lower intestine containing radio-active common salt, can be followed through the stomach and the upper intestine and finally the place and time of its solution, without interference. The radio-active isotopes possess exactly the same chemical properties as the stable isotopes of the same chemical elements.

In a quite similar manner the separated stable isotopes can be used. Adequate processes for isotope separation for several elements have been known for a few years. The stable separated isotopes can be differentiated from the natural normal isotope mixtures and quantitatively determined. Their determination is more difficult but their use has, however, the advantage that complications resulting from their radiation are eliminated in advance. It should be recognized that the course of normal functions or the determination of pathological product conversions in the inner organs can be determined by the use of these materials and can commonly be used in clinics. It can be absolutely guaranteed that the research process will not, in the slightest way, influence the course of the bodily functions.

In addition, nucleur physics can play, in all probability, a significant role in the treatment of certain diseases. The use of radium and Roentgen rays is known. In like manner, the radiation of artificially radio-active materials can be used. These materials can be directly introduced into the body so that the effect of their radiation is stronger. It is also possible that by the choice of radio-active elements, a selective location and thus a specific effect, on a certain organ of the body; (for example: glands) can be obtained (example: radio-active iodine, thyroid glands).

American workers have already obtained important cures for leukemia with the aid of radio-active phosphorus. Unfortunately, there is no possibility for such treatments in Germany because the necessary apparatus (cyclotron) is lacking.

The radiation of tumors with neutrons also seems to be very promising. The effect appears to be similar but not identical with those of Roentgen radiation. It is possible that a new and better method of fighting cancer can be developed.

Atom transformations can also be widely used in the solution of analytical chemical problems. If certain materials are bombarded with neutrons or protons or deutrons or alpha particles, they become radio-active. A bombardment with neutrons is particularly simple. The radio-active emissions of the nucleus resulting from the transformation is easily determined and with great sensitivity. Each radio-active atom, created by the radiation has a characteristic half-life. It can be identified from

this since the radiations of the bombarding particles are also known. The resulting products can be determined. Little work has been done to date on processes of this nature.

The greatest part of the sources of energy which have until now been used, stem in greater or less degree directly from the radiation of the sun. We know today with considerable probability that the sun's energy, of apparently unaltered intensity, for billions of years, is renewed by nucleur transformation processes that take place within the sun itself. Thus, nucleur transformation processes are the main source of energy of the entire world.

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In conclusion it should be pointed out that it is a manifest danger to German science that fantastic and false and even ridiculous news of scientific matters are continually printed in the large majority of German newspapers.

SECRET

HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission
APO 887

27 December 1944

SUBJECT: Transmittal of Reports - TA - by Mr. F. A. C. Wardenburg

TO : Major R. R. Furman, Room 5119, New War Building, Washington, D. C.

1. Transmitted herewith are the following brief reports prepared by Mr. F. A. C. Wardenburg, each dated 26 December 1944:

a. Inclosure 1 - Reichsforschungsrat.

b. " 2 - Translation of letters from Dr. Schmidt to Weizsacker dated 4 May 1944, and Weizsacker's reply dated 1 June 1944.

c. Inclosure 3 - Notes in connection with interrogation of Fleischmann, Maurer, Neuert, and Weygand, on 19 and 20 December 1944.

2. Copies have been forwarded to Major Calvert.

3. At Dr. Goudsmit's request, it is suggested that Dr. R. C. Tolman of the N.D.R.C. be furnished one set of these reports.

For the Chief of Mission:

GEORGE R. ECKMAN
Lt Col, MI
Deputy Chief

Incls. 3 (in trip - as above)

Carbon copies destroyed 1 Mar 49 JG

Re interest in trial.

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HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
Alsos Mission

26 December 1944

SUBJECT: Reichsforschungsrat.

Doctors Fleischmann, Maurer, Neuert and Weygand were interrogated by Dr. S. A. Goudsmit and the writer on 19 and 20 December 1944. There has been no change in their general attitude and they professed ignorance on most of the matters on which we questioned them. They continued to be uncooperative and discussed only matters which are not secret and those which they know we already know.

We obtained the names of two additional heads of departments of the Reichsforschungsrat. The Reichsmarshal's Deputy for organic chemistry is Richard Kuhn and for medicine, Sauerbrueck.

Weygand said that in the earlier part of the war, scientists were not considered very important in Germany and it was only after the submarines had been mastered that the German government began to call on scientists for help. The RFR was established in 1943 as a part of the program to organize and direct the efforts of all German scientists.

Maurer stated that Flugge was working at the Reichspost but has accepted a professorship at Koenigsberg.

Fleischmann in Strassburg claimed never to have heard of Daelenbach. In examining his notes we found Daelenbach's name and questioned him further during the last interrogation. He finally admitted having heard of Daelenbach about a year ago but the matter was so secret that he knew nothing about what he was doing or who he was.

F. A. C. WARDENBURG
Expert Consultant

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Incl. X #1

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HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
Alsos Mission

26 December 1944

In report of 16 December 1944 there was attached as Exhibit "J" a copy of a letter dated 4 May 1944 from Dr. Th. Schmidt, Greifswald University, to Weizsaecker. A translation of this letter, together with a translation of Weizsaecker's reply of 1 June 1944 are attached.

F. A. C. WARDENBURG
Expert Consultant.

INCL. B #2

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By PN NARS, Date 4/13/74

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TRANSLATION

Dr. Th. Schmidt
Physikalisches Institut
der Universitat.

Greifswald, den 4.5.44

Lieber Herr v. Weizsaecker:

Many thanks for your letter. It came on the very day when I returned to the institute for the first time after my release from the Wehrmacht. I am one of five thousand deferred by the Reichsforschungsrat. So far as I know I am to assist Herr Seelig with his war work. Even though it is very pleasant after such a long time, to be home again, this outlook does not please me particularly. It is a matter of a not very interesting and not particularly important experiment on gas discharge. I would gladly be doing something else but do not know what is now being done or will be done about such war work.

If you know of any war work in which I could take part, please write to me. Naturally, I would prefer to remain in Greifswald, if that could be arranged.

As far as materials for experiment are concerned I have here at my disposal, only the apparatus with which I earlier experimented on hyperfine structures, which is scarcely enough to start anything with.

Is the ultra-centrifuge for gas separation still of any interest? Two years ago I started to build one with Herr Bomke at the Forschungsanstalt of the Reichspost. After our leaving the Reichspost the work was not continued.

With best wishes. Your,

SECRET

SECRET

TRANSLATION

1. 6. 1944

Prof. Dr. C. F. v. Weizsaecker.

Herrn
Dr. Th. Schmidt
Physikalisches Institut der
Universitat.

Lieber Herr Schmidt.

I was very glad to learn that you are in Greifswald again. As to work currently in progress, I can mention only that with which I have been busy myself since the beginning of the war, resulting from Hahn's discovery. I would have tried to get you deferred if it hadn't been taken care of otherwise. At the moment the problems are more technical than scientific but the cooperation of a physicist is always useful. Whether or not you can work on the outskirts of the job from Greifswald will have to be determined. If you would like to do so, I could request Gerlach, who is now in charge of these matters, to include you in the group. You would not be particularly burdened. Questions of theoretical detail are always coming up and you could very well handle them in Greifswald. As regards the centrifuge, you should get in touch with Harteck. You must soon become a member of our society.

With best wishes,

SECRET

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HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission
APO 887

26 December 1944

SUBJECT: TA

TO : Major R. R. Furman.

Sam and I interrogated Fleischmann, Maurer, Neuert and Weygand on 19 and 20 December. We tried to ascertain if they had any knowledge of TA work in the United States, Great Britain or Russia, but the results were almost zero.

Fleischmann said there were two Van der Graf machines in Kharkov but apparently had no knowledge of a cyclotron in Moscow. He asked us if the Americans were separating uranium isotopes with the mass spectograph.

As regards De Bye, he repeated what he had told us in Strassburg, namely, that Heisenberg is only temporarily at the head of KWI for physics and that De Bye will probably return after the war.

It is requested that information on De Bye be made available to Lt. Colonel Lansdale.

F A C Wardenburg

MR. F. A. C. WARDENBURG
Expert Consultant

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Incl # #3

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HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATESARMY
ALSOS Mission

24 December 1944

SUBJECT: Transmittal of Report - TA Status

TO : Major R. R. Furman, Room 5119, New War Building, Washington, D.C.

1. Inclosed is a report (in triplicate) prepared by Dr. S. A. Goudsmit, Scientific Chief of this Mission, dated 23 December 1944, subject: "TA Status".

2. It is requested one copy of this report be made available to Dr. R.C. Tolman of the N.D.R.C.

For the Chief of Mission:

GEORGE R. ECKMAN
Lt Col, MI
Deputy Chief

1 Incl - Report dtd 23 Dec 44 (in trip)

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HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

23 December 1944

SUBJECT: TA Status

The accompanying exhibits (A and B) are copies of two letters from Weizsäcker to Schmidt. One of them precedes and the other follows Exhibit "J" in the report of Mr. F.A.Wardenburg, dated 16 December 1944, subject: "TA Strassburg Mission". Free translation of the important passages of this last letter is as follows:

> "Of the present activities I can only mention the one with which I have been busy since the beginning of the war and which is connected with Hahn's discoveries.....However, itsiproblems are at present more of a technical than a scientific nature, but nevertheless the help of a physicist can always be useful. A Test must tell whether it will be possible for you in Griefswald to do more than superficial work on this project. If you wish, However, I could ask Gerlach, who has the last word in such matters, to take you up in our circle. At first it wouldn't give you much to do, however, there appear occasionally some theoretical problems on which you could work in Greifswald. In regard to the centrifuge, you have to get in contact with Harteck. However, for this you must first be a member of our society."

The third exhibit is a transcription of a letter from Höcker to Harteck. The draft was hastily written in a stenographer's notebook, either by Höcker himself or by an assistant who took dictation in longhand. The date is either May 1943 or May 1944, all efforts to determine the date with certainty from the contents of the notebook have failed so far.

Herrn Prof. Dr. Harteck
Hamburg 36
Jungiusstr. 9

Sehr geehrter Herr Professor

Fuer Ihren Brief vom 5. Mai danke ich Ihnen bestens. Ich habe eine etwas klarere Vorstellung von Ihrem Vorhaben bekommen und ich sehe daraus vor allem, dass es Ihnen in ihrem Vorhaben weniger darauf ankommt, eine energielieferende Maschine ueberhaupt zu bauen, sondern daraeber hinaus die finanzielle Seite des Projekts bearbeitet werden soll. Sobald mir hier eine Rechenmaschine zur Verfuegung steht, was in etwa drei Wochen der Fall sein wird, werde ich beginnen mir eine Uebersicht ueber die Kosten einer energieliefernde Maschine sozusagen als Funktion des Anreicherungsgrades zu verschaffen. Es waere zweifellos gut wenn wir uns danach einmal ueber Einzelheiten unterhalten wuerden. Mir ist es ebenso recht wenn Sie Mich in

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Incl

SECRET

Subject: TA Status - continued. 23 December 1944

Strassburg besuchen, als ich nach Freiburg kaeme. Ihre U. Z. Anlage interessiert mich durchaus. Ich werde also sehr gern mal zu Ihnen nach Freiburg kommen. Doch braucht es von mir aus nicht das erste Treffen zu sein, unter Umstanden komme ich auch mal nach Hamburg, denn da ich in Bremen zu Hause bin kann ich dadurch zwei Fliegen mit einer Klappe schlagen.

Mit den besten Bruessen verbleibe ich, Ihr

Translation of principal passages:

"From your letter I obtained a somewhat clearer picture of your plans and I see first of all that in your plans you are less interested in the construction of an energy producing machine as such, as beyond this in the treatment of the financial aspect of the project. As soon as I obtain here a calculating machine, which will be in about three weeks, I shall start to make a survey of the cost of an energy producing machine so to say as function of the degree of increase in concentration ..... Your ultracentrifuge installation is of considerable interest to me. .....

S. A. Goudsmit

DR. S. A. GOUDSMIT
Scientific Chief

SECRET

26. 4. 1944

Prof. Dr. C.F.v. Weizsäcker

Herrn
Dozent Dr. Theo Schmidt
G r e i f s w a l d
Physikalisches Institut der Universität

Lieber Herr Schmidt!

Ich schreibe Ihnen heute nur, weil,ich seit langer Zeit nicht weiss, wo Sie sind und mich vergewissern möchte, ob Sie in sinnvoller Weise und Ihren Bedürfnissen entsprechend eingesetzt sind. Ich selbst bin, wie Sie wohl wissen, seit $1\frac{1}{2}$ Jahren in Strassburg und fähle mich hier sehr wohl. Meine Kriegsarbeiten hängen weiterhin mit dem „Dahlemer Institut zusammen, Sie werden wissen in welcher Richtung. Über ein Wrot von Ihnen würde ich mich sehr freuen.

Mit herzlichen Grüssen

Ihr

W.

EXHIBIT "A"

SECRET

SECRET

1. 6. 1944

Prof. Dr.C.F.v.Weizsäcker

Herrn
Dr. Th. S c h m i d t
Physikalisches Institut der Universität
G r e i f s w a l d

Lieber Herr Schmidt!

Es hat mich sehr gefreut zu erfahren, dass Sie wieder in Greifswald sind. An Arbeiten, die zurzeit laufen, kann ich Ihnen nur diejenigen nennen, mit denen ich selbst seit Kriegsbeginn beschäftigt bin, anknüpfend an die Hahn'sche Entdeckung. Damit hätte ich u.U. versucht, Sie uk-stellen zu lassen, wenn es nicht auf anderem Wege schon geschehen wäre. Allerdings sind die Probleme dort im Augenblick mehr technischer als wissenschaftlicher Art, aber immerhin wäre die Mitarbeit eines Physikers wohl immer nützlich. Ob Sie allerdings in Greifswald mehr als nur Peripheres daran mitarbeiten könnten, müsste der Versuch lehren. Wenn Sie aber Lust dazu haben, so könnte ich an Gerlach, der jetzt die Oberhoheit über diese Dinge hat, mit der Bitte herantreten, Sie in den Arbeitskreis aufzunehmen. Damit wäre für Sie zunächst keine grössere Verpflichtung verbudnen. Es fallen immer wieder einzelne theoretische Fragen an, sie Sie auch in Greifswald wohl behandeln könnten. Bezüglich der Zentrifuge müssten Sie sich mit Harteck in Verbindung setzen. Doch müssen Sie dazu zunächst Mitglied unseres Vereins sein. - Mit herzlichen Brüssen

Ihr

W.

EXHIBIT "B"

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HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS MISSION

23 December 1944

SUBJECT: Transmittal of Report - TA - R. Fleischmann

TO : Major R. R. Furman, Room 5119, New War Building, Washington, D.C.

1. Inclosed is report (In triplicate), prepared by Mr. F. A. C. Wardenburg, Expert Consultant of this Mission, dated 22 December 1944, subject: "TA - R. Fleischmann".

2. At request of Dr. S. A. Goudsmit, it is suggested that one copy of this report be forwarded to Dr. R. C. Tolman of the N.D.R.C.

For the Chief of Mission:

GEORGE R. ECKMAN
Lt Col, MI
Deputy Chief

1 Incl. - Report dtd 22 Dec 44 (in trip)

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HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

22 December 1944

SUBJECT: TA - R. Fleischmann.

TO : Chief of Mission, ALSOS.

There are attached translations of passages from Fleischmann's correspondence and notes, as follows:

Notes on trip to Berlin in June 1942 to obtain support for a cyclotron for Strassburg.

Correspondence with Professor R. W. Pohl, "Göttingen University."

Correspondence with Dr. Werner Maurer.

The attached material contains much interesting information on the status of physical research in Germany and the activities of German physicists in the period January 1941 - August 1944.

F. A. C. WARDENBURG
Expert Consultant

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By LN NARS, Date 4/13/76

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Transcription of Passage in Fleischmann's notes on his trip to Berlin on 1 and 2 June 1942 to obtain support for a Cyclotron for Strassburg.

Visit to Dr. Schieber, Munitions ministerium, Rüstungslieferungsamt, Pariser Platz 3. (1 June about 19:20 to 19:50)

" My letter reached him only today (1 June).

Q. If we want to put the emphasis on research or application.
A. Today naturally, on the most promising and important application.

Q. Is the principal application for energy or explosives?
A. Energy.

Q. Also explosives?
A. Difficulties pointed out.

Q. Doesn't it go off by itself?

I. It can be controlled with an n-absorber. Principal use, for example, ships with a large cruising radius, further relief of the energy economy.
HE. You emphasize medical applications. Should they not be postponed today? In view of the public health.....there are more important things today.

I. Ready to work on the most important and promising; but note ('between us'), we are thinking about radioactive dyestuffs, a new method.....Contagious diseases (spotted fever) can also be decisive in the war. Medical knowledge can have very important results. Entirely new research methods possible; for example, the following has already been done: capsules soluble in the intestines and filled with NaCl are traced from the outside because of the radiation. I am afraid of unforeseeable consequences if it is decided in advance to make no use of these processes.
HE. An important question for defense. Can a bomb be detected from a distance by its radiation in case the others have it first?
I. No answer.

With this and some other questions he referred to questions put by the minister. The minister had said that the material, including the copper, for the cyclotron could well be made available."

SECRET

Excerpts from correspondence between Dr. Rudolf Fleischmann and Professor R. W. Pohl, Goettingen University.

P to F - 10 Dec. 1940

You will be interested to know that Professor Joos, as he told me yesterday, is almost sure to be named Geheimrat Harting's successor as scientific head of Zeiss. He will first of all get himself a year's leave of absence. (Here in the Institute) we have also made good progress with our work for the Luftfahrt Ministerium.

F to P - 14 Oct. 1942

I know that you are in close touch with the Forschungsfuhrung of the RLM. I therefore assume that you are better informed than I with regard to their intentions and plans.

F to P - 21 Oct. 1942

You know the history of the Heidelberg KWI. It started with Krehl's plan, to make the methods and experiments of natural science more useful to medicine than formerly by means of real collaboration. The Heidelberg KWI has developed into a physical and a chemical institute with only loose relations with medicine. We are starting out with the same goal but intend to keep our connections with medicine closer and more lasting.

F to P - 23 March 1943

In May 1942 I had an opportunity to talk to the leader of the Reichsfachgruppe Chemie im NSBDT, Staatsrat Dr. Schieber, who belongs to Speer's Ministry. He at once promised me the necessary iron for the cyclotron, and held out good prospects for the copper. As a result of my written proposal, he showed the cyclotron plan to Reichsminister Speer in the beginning of June 1942 and requested six (6) tons of copper. Minister Speer then said: "We will certainly be able to do that". I was then without further news for a long time, and was in late August asked to prepare a proposal setting out exactly the materials required. I then discussed details of construction with Bothe, got in touch with the Elin Company in Vienna, who built the magnets for Ardenne and the Reichspost, and with the Rohde and Schwarz Company in Munich, who built the transmitter for Bothe. In addition a building plan was prepared by the Hochbauamt here in Strassburg. At the end of January 1943 I travelled to Berlin to request the endorsement of Mentzel and Esau. I needed neither money nor raw materials from them and intended to inform them of our plans only so that the Reichsforschungsrat would not feel bypassed. Mentzel sent me to Esau and told me that Esau would shortly be appointed by Goering Reichsmarshall's Deputy for Nuclear Physics. I asked Esau to support our cyclotron plans. He took the position that four cyclotrons were being built (im bau), and that none of them worked. Experience should first be gathered and then a bigger one built. He included the Paris cyclotron among the incomplete

Transcription in Fleischmann's notes of trip to Berlin on Cyclotron for Strassburg, Cont'd.

ones because it had not yet been able to operate continuously. Finally he promised me that I should have the next cyclotron that could be authorized. Esau became more friendly during the course of the conversation, and I took leave of him with the impression that I had gained a supporter. I thought that Esau would not do anything for our cyclotron, but that he was perhaps inclined to keep still about it if Dr. Schieber asked him to. Thus the enclosed text, which is classified "Secret". What is to be done now? Perhaps you can advise me. We here are thinking along these lines: The money has been authorized. Speer's Ministry is ready to supply the raw materials and labor. If we could start building now, we would have a cyclotron in five years. If we have to wait we wont be able to make a new proposal until after the war. Then money will be scarce. Esau thinks that the necessary experience should first be collected. The Americans have been gaining experience for ten years and the Paris cyclotron has been in operation for almost two. We dont want to set up in Strassburg a cyclotron with the same performance, but one with $2\frac{1}{2}$ times the magnet weight and some 25% greater ion radius, i.e. $1\frac{1}{2}$ times the energy as compared with those now being built. There is a substantial increase in performance with the exponential increase in transmutation yield. On the other hand, the increase in size is not so great as to cause phase difficulties (the period of rotation increases because of the inertia of energy, the high frequency period is constant. This results in increasing phase shifts.) I know that the construction of a cyclotron takes a long time. But I have a strong feeling that it is a question of getting a cyclotron now, or in 15-20 years. So the construction should be started now and prosecuted without interference. Do you see any chance of getting a boost from Baeumker and the RLM? Or could you speak for our plan personally with Esau?

F to P - 8 May 1943.

In the meantime I have had a chance to talk to Dr. Maurer who is working with the Paris cyclotron and who has talked to Esau and his henchmen several times about the cyclotron. The source of this news is of course intended only for you. I have learned that Esau has been several times in Joliot's institute in Paris but unfortunately only appeared at the moments when something was wrong with the cyclotron. So he has gotten the notion that the Paris cyclotron is really not ready. It is the same with those of Bothe, von Ardenne and the Reichspost which are still "being built".

F to P - 5 July 1943

The following is for your information: On June 30th while visiting the neutron installation of C. H. F. Mueller in Hamburg I met Dr. Diebner and Director Dr. Beuthe, who ranks as Esau's second in command. I broached the cyclotron matter. He said I should go to Esau again. Perhaps he would agree now. He said this in a tone that indicated he thought this the probable result. They say that Esau does everything that Beuthe recommends about nuclear physics. The prospects for our cyclotron now look a lot better to me. Diebner confirmed to me that the Paris cyclotron has been running continuously since March. So now we can draw on the experience of a working machine.

Transcription in Fleischmann's notes of trip to Berlin on Cyclotron for Strassburg, Cont'd.

F to P - 22 Jan. 1944

A few days ago I heard that Staatsrat Esau had relinquished his post as Reichsmarshall's Deputy for Nuclear Physics to Professor Gerlach. Is that right? If it is, I wonder how I can push the Strassburg cyclotron plan forward. Esau said to me a year ago: "Five cyclotrons are in construction and not one works right (including Paris); we will wait until we have some experience of actual operation. "He said further: "You get the first cyclotron that can be authorized." Now the Paris instrument has been running almost continuously since March 1943. Director Beuthe told me at the Esau conference in October: "Approach the Staatsrat again". I answered: "I will wait still until the Neutron generator is in operation and I hope that the Staatsrat will then visit Strassburg. Then I will raise the cyclotron plan again". Now that Gerlach has apparently assumed the position of Reichsmarshall's deputy for Nuclear Physics, I wonder what can be done to bring the matter forward. I have met Gerlach only once, in late 1938. Other than that I have never spoken to him. I know however, that he has a good opinion of me as a scientist. What can I do? Where does Gerlach spend most of his time? Where can I speak to him? Or, how can I get him to visit the Strassburg installation?

I want further to advise you with regard to the following: Some time ago I wrote to Herr Haxel in Charlottenburg that I would be very glad to take him as guest in this institute if the institute there got bombed out. Haxel is a first class scientist and also a practical man. He is scientifically too mature for me to invite here to an assistant's post. So it is only a question of a guest position and he would continue to be paid by Charlottenburg. Haxel has just written me that he has been moved since the beginning of the year and is working with the OKM. He could do theoretical work at the Institute but no longer practical work because of the bomb damage. At the end of the letter he wishes me luck with the neutron generator, "he will always keep an eye open to see if it may not be possible to work with me in Strassburg". So far as I know Gerlach is working for the OKM. How would he react to the idea of Haxel's coming to Strassburg? At the moment there are special opportunities for draft deferments for physicists. I can however, start nothing with regard to Haxel until I know what Gerlach thinks.

The experimental operation of the neutron installation here is scheduled for the 1st of February. On the 11th and 12th of February there will be here a secret meeting of the Verein Deutscher Chemiker on the subject of the analytical application of nuclear physics. ("for official use only").

P to F - 7 February 1944.

I will see Gerlach on 15 February at the big meeting of the Luftfahrtakademie in Braunschweig and will discuss your matter thoroughly with him.

SECRET

Excerpts from correspondence between Dr. Rudolf Fleischmann and Dr. Werner Maurer

M to F - 4 Jan. 1941, Berlin

Heisenberg and Hahn are in Berlin.

M works on molybdenum.

Flammersfeld has left Berlin.

M to F - 3 June 1941

Technical details on 1.6 million volt high tension apparatus. "Last night I irradiated 10 kg of preparation 38. It is neutrone active with long period. I expect for special reasons the period of 2.3 days which does not seem improbable so far....do not tell this any further, someone else's idea". "The two installations here have cost 70,000 marks."

M to F - 20 October 1942

No place given, but obviously from Paris. The cyclotron gives again 30 kg Jensen is here since September 15 with Gentner. Daenzer planning to come in October for two weeks". "You have certainly heard of the changes in Berlin-Dahlem and the appointment of Heisenberg as leader of physics. For me, this means a decision. I can only tell you personally what has happened to me. I do not believe that I will return to that place. The working conditions there have totally changed. Heisenberg is not a nuclear physicist. In the near future there will exist better possibilities for work for an experimenter then in Dahlem. When Bothe was here three weeks ago I asked him whether his proposal of a year ago still stood. Daenzer advised me to this. Bothe said of course, neither yes nor no. I believe however, he does not want me anymore. Do you know that Gerthsen has big construction plans? He stressed special hints in this respect. Professor Hoffmann is looking for somebody who will take over the construction of his cycletron. Diebner referred him to me. I want to go to Leipzig next week to talk to him. Very confidentially, I heard that Döepel is leaving Leipzig.

F to M - 24 September

Hoffmann has a cyclotron of Siemens. F wants M to help him build a cyclotron in Strassburg. He has the iron for the magnet and has a promise for the rest. Speer has promised him the copper. Minister Rust has requested money from the ministry of finance. The magnet will be built by a Viennese firm. F has the plans for the magnet of the Reichspost and for the magnet of von Ardenne built by the same firm. He believes the Leipzig cyclotron not to be a success and to be too much under influence of Siemens.

M to F - 3 December 1942, Paris

The magnet is again in order. Bothe and Diebner will arrive.

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Excerpts from correspond. between Drs. Fleischmann and Werner Maurer cont'd.

M to F - 7 December 1942

Bothe seems to have told M that the Siemens cyclotron has a bad high frequency outfit.

F to M - 24 December 1942

Temporarily in Erlangen. Droste works with F and seems to cause him a lot of trouble. F is still planning his cyclotron. He visited Rohde and Schwarz for the electrical apparatus at the recommendation of Gentner. The Siemens cyclotron has a pole diameter of 1010 mm., 18000 Gauss; 156 mm gap; wave-length 23 meter 80 kw.

M to F - 12 January 1943 , Paris

"Esau was here. He wants to keep us all here. He scolded about the fact that the medical people in Strassburg want a cyclotron". "The two people from the post were here. Their magnet gives only 16,000 Gauss, 160 mm gap, diameter, 1080 mm. They hope to get 10 million volt.

F to M - 16 January 1943

F mentions that Starke is going to Paris.

M to F - 25 January 1943, Paris

M has more details about Esau's position towards F's cyclotron.

M to F - 10 February 1943, Paris

Mentions that they have a new Chief, Dr. Markhoff with phone address:

HEERESWAFFENAMT, PARIS NEBENSTELLE 449

F to M - 10 February 1943

F visited Mentzel on January 28 and heard that Esau had been put in charge of nuclear physics by the Reichsmarshall. From Siemens man, he heard that Siemens has been constructing since four years a large cyclotron with 1.60 meter diameter. He did not say for whom. "There can be hardly any doubt that it is for an organization of the armed forces. Is this the large cyclotron for WaF?"

M to F - 22 February 1943, Paris

M mentions that Bothe, Diebner, Esau and Gentner will arrive on the 25th in Paris. He asks whether the general situation has caused difficulties.

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Excerpts from correspond. between Drs. Fleischmann and Maurer cont'd.

F to M - 25 February 1943

F mentions that he received one gram of radium and that Esau promised him artificial radio active substances within a few months.

M to F - 5 March 1943

Esau and Beuthe have left Paris. M was present at a discussion between Esau and Bothe. M pointed out to Beuthe the egotistic behavious of the firm of Siemens and that he regrets that F as nuclear physicist has to go empty handed whereas the Post and Siemens are allowed to build with mere beginners. M asks what is going to happen with the second Siemens magnet. M mentions a change in organization, Bothe keeps only a limited amount of the scientific direction or requests for preparations to be directed to Esau from now on. Bothe is no end fed up.

M to F - 13 March 1943

M travels to Frankfort to Degussa to order personally Be-sonden.

F to M - 26 March 1943

F mentions a rumor that the DE-priority for the Leipzig cyclotron has been withdrawn.

M to F - 9 July 1943

M works on bismuth. He mentions certain experiments performed by the AEG and claims that they are quite primitive and does not believe they will succeed. (The letter to which this is an answer is not present.)

F to M - .....?

He mentions good progress for the high tension installation. F visited the firm of Muller in Hamburg on June 30 where he met Beuthe and Diebner. Beuthe believes that permission for a cyclotron might still be granted. Esau had promised F radio active materials for biological applications. A lot of F's time is taken up by the general physics lecture.

F to M - August 1943

F complains about lack of support from Bothe.

F to M - 29 August 1943

F seems to have gotten permission to deal directly with Riezler and Maurer to obtain radio active materials from Paris.

Excerpts from correspond. between Drs. Fleischmann and Maurer cont'd.

M to F - 8 September 1943, Wiehl (M's home)

Short description of medical experiments of Paris.

M to F - 8 March 1944, Paris

Mentions experiments with separated chlorine isotopes.

M to F - 8 March 1944, Paris

M claims that the Heidelberg magnet is badly constructed.

M to F - 10 May 1944, Paris

M received 460 mg of sodium chloride, 52% Cl 37 from Clusius. Gerlach and Bothe visited Paris two weeks before. M does not believe in the invasion.

M to F - 20 May 1944, Paris

M states that the planning bureau has released 10,000 men from the Army to promote science and asks whether F has now gotten a mechanic.

M to F - 28 June 1944

Short note about work with chlorine. Mentions bad conditions in Paris.

M to F - 24 July 1944

Mentions difficulties of work in Paris and asks about possibilities to come to Strassburg.

M to F - 8 August 1944

The only typed letter has an interesting letterhead showing that Riezler and Maurer constitute an "ARBEITSGRUPPE" under Gerlach under the RFR.

F to M - 19 August 1944

F says that M will be welcome as a guest. The only other nuclear physicist in Strassburg with him is Neuert.

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MAIN HEADQUARTERS,
21 ARMY GROUP.

18 Sep, 44.

TO WHOM IT MAY CONCERN

Col. B.T. PASH and Major R.R. FURMAN are on a mission on behalf of the Supreme Commander. They should be given every facility.

E.L. Morgan

BGS(I).

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HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

18 December 1944

SUBJECT: Transmittal of Report - Strassburg Intelligence on German Nuclear Physics and TA - Dr. S. A. Goudsmit.

TO : Major R. R. Furman, Room 5119, New War Building, Washington, D.C.

1. Additional information, as a result of the Strassburg Mission, is submitted herewith in a report prepared by Dr. S. A. Goudsmit, dated 17 December 1944, Subject: "Strassburg Intelligence on German Nuclear Physics and TA".

2. It is requested one copy of this report be forwarded to Dr. R. C. Tolman, NDRC, Washington, D. C.

For the Chief of Mission:

GEORGE R. ECKMAN
Lt Col, MI
Deputy Chief

1 Incls. - Report (in dup) dtd 17 Dec 44.

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By LN NARS, Date 4/13/76

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(H-49)
(H-50)

HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

17 December 1944

SUBJECT: Strassburg Intelligence on German Nuclear Physics and TA.

Evaluation of part of documentary evidence obtained at Strassburg leads to the following conclusions:

1. TA experiments are in progress in Germany.

a. Plates and cubes of U. produced by Auer (June 1943).

b. Reference to large scale experiments at Dahlem ("Grossexperimente") (August 1944).

c. References to experiments at Gottow (March 1944), in connection with Heisenberg's computations.

2. The main interest is in a "pile".

a. Fragments of pile computations by Höcker for Heisenberg. (June 1943, August 1944).

b. Project title: "Energy Production from U." (August 1944).

c. References to and computations for a "U Machine".

d. No positive evidence of location of pile.

3. The effort is not large.

a. Several good nuclear physicists do not directly work on the U. problem (Fleischmann, Neuert, Maurer, etc.), but work on pure nuclear physics, or biological and metallurgical applications.

b. Only those connected with the KWI are actively engaged on it. (Bothe, and co-workers, Heisenberg and co-workers).

c. Von Weizsäcker spends only a small portion of his time on TA theory (very frequent lecture trips in Germany and outside, books and articles on philosophy and on astrophysics).

d. Three good nuclear physicists were left behind in Strassburg by the Germans - Fleischmann, Maurer and Neuert.

e. No evidence was found of a large concentration of physicists at one place.

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4. A large effort is made to keep up with the U.S. in pure nuclear physics.

a. Army release of 5,000 or 10,000 men to "promote science", (May 1944)

b. Advance of U.S. in nuclear physics is used as argument to obtain equipment.

c. Minister Rust requested explicit data on advance in U.S. on nuclear research, (September 1941).

d. Independent research on nuclear physics was being started at several places (Strassburg, Leipzig, Berlin, Paris, Reichspost, Luftwaffe, PTR, KWI, etc.)

5. Coordination of nuclear research under Goering is for the promotion of all branches of nuclear research and is not secret.

a. Letterheads, envelopes and rubber stamps openly indicate the existence of Goering's representative for nuclear physics (Esau, Gerlach, Paris group, Posthalde lab.).

b. Requests for biological preparations from Paris for Strassburg must be approved by the "coordinator" (Esau) (March 1943).

c. Approval for a cyclotron or other equipment for pure research has to be given by Esau, or later Gerlach.

6. The theoretical effort on TA seems more coordinated than the experimental effort.

a. Von Weizsäcker and his assistants are in constant contact with Heisenberg.

b. Practically no contact between Fleischmann's experiments and von Weizsäcker's theoretical groups, though they are at the same university.

c. Maurer in a letter to Fleischmann, openly declares that Heisenberg is not a nuclear physicist, that his appointment at Dahlem is regrettable and bad for the development of nuclear physics there. (October 1942)

7. The following facts stand out in the correspondence found at Strassburg.

a. There are four cyclotrons under construction in Germany (March 1943), in Heidelberg, Leipzig and two for the Reichspost. Fleischmann has been refused a fifth one in spite of his vigorous efforts to obtain

Subject: Strassburg Intelligence on German Nuclear Physics & TA - Cont'd
17 December 1944.

approval. The cyclotron secretly built by Philips at Eindhoven is never mentioned. The Paris cyclotron is the only one that functions and physicists are sent there to gain experience. It is used for producing materials for biological experiments. Siemens is also sponsoring cyclotrons and getting interested in nuclear physics, they built the Leipzig one and possibly one more. The Heidelberg magnet and one for the Reichspost are built by Elin Werke in Vienna. (Compare ALSOS report on Philips, Eindhoven).

b. High Tension Installations: Fleischmann's H-T. apparatus is placed in the medical department and used primarily for biological experiments. The Reichspost has a H.T. apparatus at their laboratory in Zeuthen, southeast of Berlin.

c. TA - Experiments: The metal is produced by Degussa-Auer. Bothe keeps in touch with the developments and indirectly the theorists on TA. Unnamed experiments are performed at Dahlem (obviously KWI) and at Gottow, the latter under supervision of Diebner. The KWI for iron research asks advice on radio-active measurements to determine thorium, uranium contents, (October 1944).

S. A. Goudsmit

DR. S. A. GOUDSMIT
Scientific Chief

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HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

16 December 1944

SUBJECT: Transmittal of Report - "TA - C. F. Von Weizsäcker"

TO : Major General L. R. Groves, Room 5119, New War Building, Washington, D. C.

THRU : Lt. Colonel Boris T. Pash, Chief of Mission, ALSOS Mission, Room 2E814, The Pentagon, Washington, D. C.

1. Inclosed are three copies of report prepared by Mr. F. A. C. Wardenburg, expert consultant of this Mission, dated 11 December 1944, Subject: "TA - C. F. Von Weizsäcker".

2. This report is supplementary to that forwarded with Colonel Pash on his return to Washington, 8 December 1944.

For the Chief of Mission:

GEORGE R. ECKMAN
Lt Col, MI
Deputy Chief

1 Incl:
Report dtd 11 Dec 44 (in trip)

Deputy cancelled letter & 2cc's report destroyed 1 Mar 45 EPW

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By EN NARS, Date 4/13/74

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HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

11 December 1944

SUBJECT: TA - C. F. von Weizsäcker

The following miscellaneous intelligence has been gathered from files of von Weizsäcker found in Strassburg.

(1) In a letter to Dr. K. Diebner, Heereswaffenamt, Forschungsabteilung, Weizsäcker advises that Moliere cannot take the position as his assistant in Strassburg for reasons of health, and asks that he be allowed to have Höcker in his stead. He assures Diebner that both he and Höcker will continue their former work (bisherigen Arbeiten) in Strassburg.

The following is Höcker's military service status as of 30 March 1943:

(2) "Name: Dr. Karl-Heinz HÖCKER
Stellung: Wissenschaftlicher Assistant am Institut für Theoretische Physik Scientific Assistant at the Inst
Geburtstag: 27.12.1915
Geburtsort: Bremen Place of birth
Wehrnummer: Breman I 15/1/275 Military number
Wehrbezirkskommando: Strassburg Military Dist Strassburg
Dienstzeit: vom 2.12.40 bis 14.7.42, Nebelwerfer-Rgt.53
Time of service Smoke Laying regiment
Nach Durchführung eines DU-Verfahrens entlassen. Discharged after completion of DU proceedings
Tauglichkeitsgrad: av.
Uk-gestellt auf Grund des Auftrages SS 072 0150/42 H
Auftraggeber: OKH."

Höcker, advised the military authorities in Strassburg that he had to be absent from Strassburg between 31 July 1943 and 16 August 1943. From 1-10 ugust that his address was:

(3) Bremen 8, Sommerstrasse 41 } Home Address. Presumably vacation.

and from 11-15 August was:

(4) Berlin-Dahlem, Boltzmannstrasse 20

Moliere, Höcker and Bopp were working on a book on cosmic rays and were planning to hold a seminar on the subject in the summer semester of 1944.

A circular letter from Dr. Esau, Reichsmarshall's Deputy for Nuclear Physics, dated 7 January 1944 and addressed to von Weizsäcker in Strassburg, advised that

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draft deferments for men working on nuclear physics problems must be renewed. The recall of scientists from the army for technical work had become increasingly difficult and under no conditions could men be gotten from the east front and no men younger than those born in 1919. The letter also states that the recommendation for War Service Crosses, second class, must be renewed through the RFR. Weizsäcker replied that he had already taken care of the draft deferments through the curator of the university and incloses a renewal of his recommendation that the War Service Cross be granted to Dr. Höcker.

(10)

A letter dated 8 February 1944 gives the following address:

(5) Institut für Radiumforschung
Wien IX, Boltzmanngasse 3

A letter dated 26 April 1944 is addressed as follows:

(6) Herrn
Dozent Dr. S. Flügge
Forschungslaboratorium der Reichspost
Berlin

A post card from Houtermans dated 18 April 1944 mailed from Ronneburg (Thuringen) addressed to Weizsäcker speaks of his having been sent to Ronneburg in connection with his work for the PTR on counter tubes.

(7)

The following address is taken from a letter dated 7 May 1944:

(8) Deutsche
Physikalische Gesellschaft E.V.
Der Vortsitzende:
Prof. Dr. C. Ramsauer
Berlin-Reinickendorf-Ost
Holländerstr. 31/34
Telefon: 49 21 01

The following address is taken from a letter dated 12 May 1944:

(9) Marine-Nachrichtenmittelbetrieb
Königsberg (Pr) 5
Schichau-Werft

Höcker traveled from Strassburg to Freiburg on 13 and 14 June 1944, on business important to the war effort.

Heisenberg was in Strassburg in June 1944, as evidenced by a certificate that he needed railway reservation to Berlin for the night of 6 and 7 July 1944. The certificate is dated 24 June 1944.

At the time he left Strassburg for Hechingen, 26 August 1944, Weizsäcker expected to be absent only some six weeks for the prosecution of war work. This probably explains why he left all his files in his office at the University.

MR. F. A. C. WARDENBURG
Expert Consultant

SECRET

8 December 1944

Dr. S. A. Goudsmit
G 2
Com. Z., APO 887

Attention: ALSOS

Dear Sam:

I have just finished reading your preliminary report on Strasbourg that you prepared for Mr. Tolman. It was most interesting and from your report looks as if Strasbourg will be a fertile field for TA information. Both Bob and myself believe it to be necessary that you stay in Strasbourg exploiting TA leads until you are thoroughly convinced that there has been no stone left unturned. We also think it highly necessary that as soon as practical upon your return from Strasbourg, that you should spend some time in Switzerland prior to your return to the States. As you already know, Heisenberg and Von Weizacker are scheduled to be in Switzerland on or about 15 December to deliver scientific lectures. I plan to be in Paris the first part of next week at which time I would like to discuss in detail the opportunities and problems that Heisenberg's presence in Switzerland might create.

You will be interested to know that a prisoner of war has been located that served as an apprentice with the "Reichpost" in the field of telegraphy. While the prisoner of war is only seventeen years old, he has proven to be very intelligent, fully cooperative, and his statements can be considered reliable. Moreover, he is the son of a Berlin post office employee. In his first interview he made the following statement:

> BERLIN-TELTOW, Mahlower Chaussee (GSGS 4480/3,R6) on open field next to new houses on South side of rd, approx opposite Moltkestr. PW states that the building was damaged by air-raid in 43, and about Jun 43 most of the establishment was transferred to ZEUTHEN nr BERLIN.

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PW knows of no other locations.

PW went there once to install alarm wires around X-ray tubes (in his own words), which were supposed to be used for experiments in splitting the atom. If the tubes got overheated, the wire was supposed to melt and thus actuate the alarm. PW can give no further details of the activity of the Versuchsanstalt, and the title given by him to the Institute should be accepted with reserve."

As you see from the above prisoner's of war statement, the information that you obtained in Eindhoven is apparently confirmed. We are making a search at the present time to determine this prisoner's of war whereabouts in order that he might be brought to London for further interrogation concerning ZEUTHEN and hoping that he can possibly ~~ascertain~~ pinpoint the location of ~~the~~ ZEUTHEN nr BERLIN from aerial reconnaisance that we already have in our possession.

For the Military Attache:

H. K. Calvert

H. K. CALVERT
Major, F.A.
Assistant to the Military Attache

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HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

17 December 1944

SUBJECT: Transmittal of Report - "TA Strassburg Mission" - by Mr. F.A.C. Wardenburg.

TO : Major General L. R. Groves, Room 5119, New War Building, Washington, D.C.

THRU : Lt. Colonel Boris T. Pash, Chief of Mission, ALSOS Mission, Room 2D 814, The Pentagon, Washington, D. C.

1. Inclosed are three copies of report prepared by Mr. F. A. C. Wardenburg, expert consultant of this Mission, dated 16 December 1944, Subject: "TA - Strassburg Mission".

2. This report is supplementary to that forwarded with Colonel Pash 8 December 1944 and to that forwarded by mail 16 December 1944.

For the Chief of Mission:

GEORGE R. ECKMAN
Lt Col, MI
Deputy Chief

Incl:
Report dtd 16 Dec 44 (in trip), with incl of Exhibits 'A' to 'L'

"B" missing Review
See W.A.S. comment attached

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By BL NARS, Date 4/13/76

Haas, Fleischmann, Neuert & Maurer

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HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

16 December 1944

SUBJECT: TA Strassburg Mission.

Copies of reports of interrogations of Mrs. Anna Haas, Dr. Rudolf Fleischmann, Dr. Hogo Neuert and Dr. Werner Maurer are attached (Exhibit "A"). Mrs. Haas is believed to be a reliable informant, but the others are not, and their statements are to be accepted with considerable reserve.

Photostatic copies are attached of three tables, and some supporting calculations, entitled "Summary of Data for the Theory of the Uranium Machine". The handwriting is believed to be Höcker's. (Exhibit "B"). ← not here 1 Mar 49 Kp.

Official German interest as early as September 1941 in American TA activities is evidenced by two letters (Exhibits "C" and "D") written by von Weizsäcker to the Army high command and to Reichsminister Rust respectively. The first passes on a Swedish press report concerning an atomic bomb being developed in the U. S. A. The second forwards information requested by Rust at a conference in July 1941 concerning American advances over Germany in the field of nuclear physics.

Exhibit "E" is a certificate to the effect that the Strassburg Theoretical Physics Institute urgently requires two slide rules for work on an important war order No. SS 072. 0150/42H.

The date of the establishment of the Hechingen branch of the KWI for Physics is fixed at approximately mid-September 1943 by letter from von Weizsäcker to Wirtz (Exhibit "F") dated 23 September 1943 in which he says that he assumes that he should address Wirtz in Hechingen and not in Berlin, and asks if Heisenberg has found a place to live there.

Exhibit "G" gives the number of another of the Institute's war orders, SS 4891-0194 (1642/11)-11/43.

A letter from von Weizsacker to Heisenberg (Exhibit "H") dated 18 January 1944 is addressed KWI for Physics in Berlin, thus indicating the continuation of activities there and at least Heisenberg's occasional absence from Hechingen. Von Weizsäcker asks Heisenberg to use his influence to squelch a plan to put him in charge of Bohr's institute in Copenhagen.

Exhibits "I" and "J", letters regarding possible transfer of physicists to von Weizsäcker, are of general interest in connection with the employment of physicists on war projects.

Exhibit "K", a letter from Houtermans to von Weizsäcker written from Ronneburg on 29 July 1944, refers to old experiments on thermal neutrons at low temperatures which may have interesting consequences for the "U-Frage".

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In letter dated 7 August 1944 to Osenberg (Exhibit "L") von Weizsäcker explains that his part of the project has only "SS" priority since his expenses consist only of salaries. Such projects are not assigned "DE" priority.

S. A. GOUDSMIT
Scientific Chief

F.A.C. WARDENBURG
Expert Consultant

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O P Y

Exhibit "A"
ALSOS
STRASSBURG
MISSION
15 Dec. '44

This was read in English

~~SECRET~~

Interrogation of Mrs. Anna Haas, 3 December 1944, Strassburg.

Mrs. Haas is Alsatian. She makes a very sympathetic impression -- is not Nazi. In 1939 and 1940 she worked as secretary in the Poudre--rie de Toulouse with Nicolai and Colonel Colas, and later Lt. Fouchier. The department in which she worked was known as "Ateliers et Machines". Her position in France was not agreeable and after the occupation she returned to Strassburg where she first worked for Mannesmann Stahlblech Werke. She was required to work considerable overtime and was thus unable to give adequate attention to her home and two children. She heard that Professor Finkelnburg of the university needed a secretary. She applied for and secured the position and started work at the university on 15 March 1943. She did secretarial work for both, Professor Finkelnburg and von Weizsäcker. She describes von Weizsäcker as a man of very agreeable personality. She stressed that he was not a party member. She only did secretarial work for him and had nothing to do with scientific work. She was sure that the scientific work was of importance to the war but had not the faintest idea of what it was all about. She thinks he was very discreet and never mentioned it. She did state that Finkelnburg's war work was in connection with searchlights.

Von Weizsäcker is a close personal friend of Heisenberg and he wrote to Heisenberg in Berlin. Heisenberg visited Strassburg in the summer of '44. Mrs. Haas describes him also as being a man of character and since he is a good friend of von Weizsäcker, she thinks that he must have similar political views. Both of them, although not Nazis, are good Germans and will work for the welfare of their country.

Von Weizsäcker made frequent trips to Hechingen. She did not know how often he went there. She frequently did not know of his departure. She believes von Weizsäcker together with Hocker, his assistant, left Strassburg permanently in September 1944. She is quite sure that they went to Hechingen where there is a branch of the KWI. She does not believe that there is any apparatus at Hechingen and is of the opinion that the work done there is entirely theoretical. She knows that Heisenberg is there too. When asked whether they were located in some special building like the castle, she answered that she did not believe so. The officers were probably in a hotel and she had the impression that von Weizsäcker was living somewhere with a private family. She would certainly have known, she feels, if they had been located in the famous castle. She indicated that there was only official relation between Finkelnburg and von Weizsäcker and that it was certain that Finkelnburg knew nothing about von Weizsäcker's work. She also stated that Fleischman and von Weizsäcker did not work together.

She could recall that Professor Jordan, Dr. Wirtz and Professor Ramsauer visited the university while she was employed there.

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Exhibit "A"
Continued.

Interrogation of Dr. R. Fleischmann - Strassburg - 4 December 1944.

F. is an extreme Nazi. He has taken part in the activities since a very early date. He is not cooperative. He claims that anybody who wants to do research work must have at least an SS priority. Fortunately, the German government considers some fundamental research sufficiently important to permit its continuance. He claims that his work is of a fundamental nature and covers exclusively application of induced radio-activity to biological research. His work is in the medical department. He claims not to know anything about what other physicists are doing, except rumors, which he refuses to discuss. He claims that the KWI of Berlin has been evacuated to somewhere south of Stuttgart, but he will not tell the location. He claims that Heisenberg, the present director of the physics branch of KWI is only a temporary replacement for Debye. He believes that Debye has still a right to the position which he can take up when he returns. Asking him why there were so many high tension machines being built, he replied "There were many more in the U.S.A." The high tension machine at Strassburg is new and was built by Mueller of Hamburg. Other machines are in Leipzig (Hoffman); Cologne (Kirchner); Heidelberg (Gentner) and Berlin-Dahlem (Ramm). He stated that Kirchner's laboratory at Cologne was bombed out and that he was going out to Garmisch-Partenkirchen. He repeated that there was only one cyclotron in Germany. The one in Heidelberg was designed by Bothe and Gentner. There are Vander Graaf machines in Heidelberg, Danzig (Kessel), and Berlin (von Ardenne). The von Ardenne machine was financed by the Reichspost, and Fleischmann cannot explain this association, except on the grounds that von Ardenne is a very good business man. He gives only a vague picture of the RFR. He says that Gerlach is in charge of all physics. More recently he has also been in charge of Nuclear physics. Before him, Esau was in charge of that branch. The entire RFR normally reports to Reichsmarshall Goering. When asked why they did not use a nuclear physicist in that important position, he replied that he believed personally that Bothe should be in charge, but that he does not possess the right personality. Although he is listed in the Strassburg university catalog as giving a course on the separation of isotopes, he claims that it was not given during the last semester because nobody showed up for it. He mentioned having done work on the separation of the isotopes of carbon of nitrogen.

6 Dec. 44

F. reported that he had done research work for the Air Forces because they used to have better means and priorities than the Ministry of Education. However, this is different now. About 1½ years ago the Fuehrer ordered the establishment of a research council (RFR) directly under Marshal Goering. The order included the statement that the existing research council which was then under the Education Minister, Rust, should be included in the new council. So now everything is under Goering, who according to F. has the facilities for getting things going. This RFR has branches for the different sciences. It is also supposed to support strongly fundamental scientific researches in order to make sure that Germany shall not be behind as compared to the Allied countries.

F. does not claim to know anything about the personnel on the RFR. He knows vaguely that Gerlach is in charge of all physics and more precisely that he is now in charge of a branch on nuclear physics as we know already from documentary evidence.

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Exhibit "A"
ALSOS
STRASSBURG
MISSION
15 Dec. 44

SECRET

Interrogation of Dr. Hugo Neuert - 4 December 1944.

Neuert worked with Kirchner in Cologne beginning in 1931. After the start of the war he was in the Luftwaffe as a meteorologist but was released to return to Cologne to assist Kirchner, particularly in the installation of a new high tension apparatus. Since coming to Strassburg he has worked exclusively with Fleischmann on medical problems.

Mattauch and Flugge are working with Hahn whose laboratory has been evacuated to southern Germany, Clusius is in Munich. Diekman is at Munich - Grafelfing engaged in radio research.

Two years ago there was more interest in Germany in nuclear physics than there is now.

Interrogation of Dr. Werner-Maurer - 4 Dec. 1944 - Strassburg

Maurer spent three years working in Joliot's laboratory. No war work was done for Germany. All the work had medical applications as for example separation of the isotopes of bismuth. Rietzel and Starke were also there. There was excellent cooperation from the French and no difficulties were experienced.

Maurer thinks that the best nuclear physics institute in Germany is the one at Heidelberg. Clusius worked on the separation of the isotopes of copper, silver and chlorine. von Ardenne has a cyclotron. Hautermans has worked with him. Heyn (of Philips) visited Joliot.

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[Translation of Exhibit "C", Alsos Strassburg Mission, 15 Dec. '44]

SECRET

4 September 1941

To the

High Command of the Army

WaF I

Berlin W 35
72-76 Tirpitz-Ufer Street

The following announcement came to my attention through the Press Division of the Foreign Office:

Stockholm, as reported by "Transozean-Innendienst" [Translator's note: A German news agency]:

In the United States scientific experiments are being made on a new bomb, according to a report from London appearing in the Stockholms Tidningen [Translator's note: A Stockholm newspaper]. The material used in the bomb is Uranium, and if the energy contained in this element were released, explosions of heretofore-undreamed-of power could be achieved. Thus a five-kilogram bomb could create a crater 1 kilometer deep and 40 kilometers in radius. All structures within a range of 150 kilometers would be demolished.

Dr. C. F. v. Weizsäcker

Translations of Exhibits C & L, incl. by P.C. Fine & W.A. Shirali

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SECRET

/Translation of Exhibit "D", Alsos Strassburg Mission, 15 Dec. '44/

Registered

5 September 1941

(from) Dr. C. F. von Weizsäcker

(to) Reichsminister Rust
National Department for Science, Instruction, and Popular Education

Berlin W 8
69 Unter den Linden Street

Honorable Reichsminister:

In an attached paper I am sending you the report of America's advantage over Germany in nuclear physics, which report you asked me for during the course of the interview you granted me in the latter part of July. It is unfortunate that such long delays in completing the report have been introduced by the investigations which I set up for that purpose and by duties of military importance.

I again express my respect, and my thanks for the support which you, Mr. Reichsminister, have given to the advancement of science.

Heil Hitler

Yours very truly

(signed) C. F. W.

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SECRET

[Translation of Exhibit "E", Alsos Strassburg Mission, 15 Dec. '44]

Strassburg, 18 December 1942

2 Wimpfelin Street

Certificate of Urgency

The Institute for Theoretical Physics at the National University of Strassburg needs two slide-rules for carrying out a project (SS o72.0150/42 H) of military importance. The Institute is organized for the winter semester of 1942-43, and could not take over supplies at an earlier time; thus the purchase of two slide-rules is of unquestionable necessity for carrying out the war project and for the Institute's activities.

[Signed] W

(Prof. v. Weizsäcker)

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SECRET

[Translation of Exhibit "F", Alsos Strassburg Mission, 15 Dec. '44]

(from)Prof. C. F. v. Weizsäcker

(to)

Dr. Karl Wirtz
Hechingen (Hohenzollern)
Hotel zum Löwen

[Translator's note: Date of this letter indicated in covering Alsos memo as 23 September 1943]

Dear Karl:

I assume that it is correct to write you in Hechingen rather than in Berlin. Regarding Bagge's comment: The Lorentz condition is an arbitrary requirement and, as I see it, can therefore be regarded as a convention. I recall that this notation is used in the English literature; however, if Bagge has feelings against it he is at liberty to change it.

In view of your move to Heckingen, will we get a chance to see each other? Has Heisenberg found a place to stay in Hechingen?

Best Wishes,

[Signed] C. F.

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~~SECRET~~

[Translation of Exhibit "G", Alsos Strassburg Mission, 15 Dec., '44]

Institute for Theoretical Physics
National University of Strassburg

Strassburg, Alsace
22 October 1943
2 Wimpfeling Street

Miss Hanne Mann has performed war duties in the Institute for theoretical Physics at the National University of Strassburg from 15 August to 15 October 1943. (Work on war project SS Number 4891 - 0194 (1642/11) - 11/43)

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SECRET

/Translation of Exhibit "H", Alsos Strassburg Mission, 15 Dec. '44/

(from) Prof. C. F. v. Weizsäcker

/Translator's note: Date of this letter indicated in Alsos covering memo as 18 January 1944./

(to)
Prof. W. Heisenberg
Berlin-Dahlem
Kaiser Wilhelm Institute for Physics
20 Boltzmann Street

Dear Werner:

Many thanks for your letter of the 9th and for the book on the atomic nucleus, which has just arrived. Even though the book on high altitude radiations /Translator's note; Cosmic rays/ would have been still more important, nevertheless I find it gratifying that at least the nuclear book has now appeared. I hope you have by now received the report which I sent you at Hechingen. If you are going to Copenhagen, then I would like to say this: Wirtz wrote me quite confidentially that he had heard from Diebner that the German representation in Copenhagen is thinking of giving me the job of directing the Bohr Institute. He has undoubtedly told you about it already. However, if I am the first to tell you about it, please don't mention it to Diebner. Although it practically goes without saying, I wish to give you definite assurance that I would be decidedly unhappy to take on that kind of a post. If this plan is still intended, I would be very grateful to you if you could use your influence to change it. I am intending to be in Berlin from the 15th or 16th of February until the 18th, and on the 18th to lecture in Laue's colloquium on planets -- on verbal communications from my friend Hoffman.

Best Wishes,

Your

(signed) C. F.

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SECRET

/Translation of Exhibit "I", Alsos Strassburg Mission, 15 Dec. '44/

(from) Prof. C. F. v. Weizsäcker

/Translator's note: Date of letter not indicated./

(to)
Dr. Karl Steinbuch
Research Institute of the AEG /Translator's note: AEG stands for "Allgemeine Elektrizitätsgesellschaft" or "General Electric Company," a large German manufacturer of electrical equipment./

Dear Mr. Steinbuch:

I am much obliged to you for your letter of March 19 and for the filled-out questionnaire. If the possibility in question materializes and you are willing, I will gladly take you on at once for my war project at my Institute. You will then have the opportunity to go ahead in science in the university sense. I am also prepared to take you on as of a later date. To be sure, I have no regular position for you now, but would probably be able to finance a modest payment out of my war project funds. Under the present circumstances I certainly can certify you as being indispensable. /Translator's note: German word is "uk-stellen" which is supposed to be an abbreviation of "unabkömmlichstellen" and apparently implies exemption from military service./ Anyway, in accordance with my every intention, I would have had you brought back from the front, if only AEG had not gotten ahead of me. On the other hand, I am unable to foresee whether I could win through in a struggle over you with the AEG. My project has the priority SS. /Translator's note: A higher priority is DE./ I would like to ask you to write me, if you get a chance, whether you would consider such a move favorably and, if so, whether the outcome would likely be successful. The way things look now, I will be going to Berlin again in the course of the next 6 weeks; perhaps we can discuss the matter orally at that time.

In the meantime, Best Wishes,

Your

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SECRET

/Translation of Exhibit "J", Alsos Strassburg Mission, 15 Dec. '44/

/Translator's note: Date of this letter not indicated./

(from)
Dr. Th. Schmidt
Physics Institute of the University

Dear Mr. v. Weizsäcker:

Many thanks for your letter. It arrived exactly on the day on which I was released from the Army and transferred to the Institute. I was one of 5000 persons certified by the National Research Council as being indispensable. /Translator's note: German word is "uk-gestellt" which is supposed to be an abbreviation of "unabkömmlichgestellt and apparently implies exemption from military service./ As far as I know now, I am to help out in Mr. Seeliger's war work. It is so wonderful to be back home again after all this time that this prospect is less pleasing to me. It is a matter of not very interesting and not really important research on electrical discharges in gases. I would much rather work on other things, but I haven't any idea what might be done immediately in regard to such war work, or what should be done.

If you know of war work in which I could participate, please write me about it. Naturally I would be very glad to remain in Greifswald, if that were possible.

In regard to experimental equipment, I have available at the moment only the apparatus with which I did my earlier research work on the hyperfine structure, and that is hardly suitable now for starting anything.

Is there still any interest in the ultra-centrifuge as a means of separating gases? Two years ago Mr. Bomke and I, working together in the Research Establishment of the National Postal Department, started to build such a centrifuge. After we left the Postal Department, the work was not continued.

With Best Wishes,

Your

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~~SECRET~~

/Translation of Exhibit "K", Alsos Strassburg Mission, 15 Dec. '44/

National Institute of Physics and Technology
/Physikalische-Technische Reichsanstalt/

29 July 1944

Ronneburg

Dear Mr. v. Weizsäcker:

As I telegraphed you yesterday, it has now become possible for me to lecture at your place on the 9th. On the 3rd I have to go to Frankfurt and from there to Heidelberg; from there I might come to Strassburg on the evening of the 8th or the morning of the 9th (preferably the former), if you succeed in getting me into a hotel. I would like to ask you in this connection to send word to Bothe's Institute in Heidelberg, since I fear that your message would no longer be able to reach me here. As regards the topic, it will consist in part of some very old experiments on the properties of thermal neutrons at low temperatures -- a lecture which, actually, I have already given at Heisenberg's place. It deals with old experiments, carried out for the most part in Charkow /Translator's note: Probably Kharkov, Russia/ which however might have some interesting consequences in regard to the U-question, and which as far as I remember I have already spoken to you about, and which has now become ripe for discussion because the thought was taken up from another direction. 2. Concerning negative absorption coefficients. This relates to a topic that is more optical in nature, a still unpublished work by Rompe and myself, which will perhaps be of interest to Mr. Finkelnburg; I once told him briefly the ideas about this. 3. A short remark on the radioactive determination of the age of the earth. 4. On a semi-empirical relation between the maximum density of thermal neutrons and the dimensions of a neutron source in a slowing-down medium. /Translator's note: This "slowing-down medium" is presumably what we call a "moderator."/ 5. On the (n,2n) process in beryllium. The last two researches should appear shortly in the Physikalische Zeitschrift /Translator's note: A German physics journal./. Please select what interest you most and settle on a program and write me what I should lecture on. Unfortunately I have no lantern slides anyway and will bring along the materials for the topics selected. The topic on the age of the earth is not a whole lecture but only a short remark and perhaps the basis for a discussion, which we can carry on just as well in private. I am glad that something will come

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/Translation of Exhibit "K", continued/

SECRET

of the trip and ask your pardon that I could give you no definite answer for so long, because of the cumbersome bureaucracy of P.T.R. /Translator's note: P.T.R. stands for "Physikalische-Technische Reichanstalt" or "National Institute of Physics and Technology."/

With Best Wishes to you and all
my friends,

Your

/s/ F. G. Houtermans

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SECRET

[Translation of Exhibit "L", Alsos Strassburg Mission, 15 Dec. '44]

(from) Prof. C. F. v. Weizsäcker

[Translator's note: Date of this letter indicated in covering Alsos memo as 7 August 1944]

(to)
Prof. W. Osenberg
Northeim (Hannover)
Post Office Box 148

Dear colleague:

May I turn to you with the following question? I am seeking an assured position for an unusually talented student, an Alsatian born in 1924. He possesses a workman's passport and for about a year has carried out, as an assistant, calculations of military importance in the Mathematics Institute of the University of Strassburg; at the same time he has been sitting in on some courses and has been enrolled in others. His deferment from military service expires on August 12. He has not yet received an induction order. If he were not called up, he would now go over to my Institute to carry out calculations on the basis of my project SS 4891-0659 (2363/11)-II/44. My project is part of a plan that is conducted under the Reichsmarschall's Deputy for Nuclear Physics and for that the project number DE 811-RFR-III/44-12/44 is authoritative. My own project does not bear the DE number because the special expenses of my Institute consist only of salaries, which may not be counted in this category. My question is this: Is there a possibility of assigning this assistant to my Institute perhaps as a helper without student rights? His services are urgently needed by me.

With thanks and

Heil Hitler!

Yours very sincerely

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JAMES B
RICHARI
ROGER J
CONWAY
KARL T.
FRANK I
CAPT. LY
MAJ. GE

IRVIN S

~~SECRET~~

30 December 1944

Limited

MEMORANDUM

To: Major F. J. Smith

From: W. Shurcliff

Re: Preliminary Analysis of "Exhibit B" of the material transmitted on 15 December 1944 by the Alsos Strassburg Mission.

Explanation:

At Dr. Tolman's suggestion, I have been helping with the translation of the material transmitted on 15 December 1944 by the Alsos Strassburg Mission. One of the items, Exhibit B, consists of five pages of numerical tables.

Summary:

On the basis of an analysis of approximately half of this material, it appears clear that the exhibit represents a sort of summary of calculations (of rather elementary nature) as to the neutron physics of a slow-chain-reaction pile containing natural uranium and heavy water. Some details of the preliminary analysis are given on the attached page.

This material is probably not concerned appreciably with questions of pile shape and pile size. Many of the constants given are similar to those contained in the Chicago "Project Handbook", Chapter IV, Parts A and E. The tables are in general incomplete and informal; some mistakes in arithmetic are apparent.

A more thorough analysis can be made if this document can be given to us again for further study.

refers to Goudsmit-Weisskopf report 7 Feb. transmitted under date 27 Dec.

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E.O. 11652, Sec. 3(E) and 5(D) or (E)
Authority NND 760135
By ..... NARS, Date 4/13/76

SECRET Limited

Details of "Exhibit B" of the material transmitted on 15 December 1944 by the Alsos Strassburg Mission.

Page 1. Page 1 of the Exhibit "B" contains Tables 1 and 2.

Table 1 gives: Effective cross-section, the unit used being 10^{-24} (called a "barn" by U.S.A. scientists)

Column one lists scattering cross-sections, capture cross-sections, and fission cross-sections, all with respect to neutrons.

Row one lists the elements of interest: Hydrogen, deuterium, carbon, oxygen and uranium.

Row two gives scattering cross-sections for thermal neutrons, neutrons having an energy of 7 electron volts, and fast neutrons. Values for hydrogen apply to hydrogen in water and also in paraffin.

Row three gives a cross-section value for Uranium "including unknown absorbers", indicating that little was known to the Germans about impurities.

Table 2 gives: (in line one) Number of nuclei per cubic cm. for the indicated scattering elements (hydrogen, deuterium, carbon, oxygen and uranium) in the indicated compounds: water, pariffin, etc.
(in line two) "Logarithmic Energy Decrement" of neutrons colliding with nuclei of the indicated species. (The Chicago "Project Handbook", Chapter IV, Part E, pg. 6 calls this quantity ξ, and assigns it the identical values appearing here). All data in this particular table are computed from constants and equations well-known even before the war.

Page 2. Page 2 contains one table, which might be entitled "Table of scattering, slowing-down, diffusion, mean-free-path, etc. constants" for thermal neutrons in graphite, paraffin, ordinary water, heavy water, natural uranium, and natural uranium oxide. The table is complete only for heavy water and natural Uranium (Lines 6, 7, 8, and 9 of the table are not understood at this time).

Pages 3, 4, 5. Pages 3, 4, 5 contain arithmetical computations the results of which appear in Table 3. These pages contain also two tabulations of constants; thus page 4 lists values of thermal velocities of the atoms in the various materials, and page 5 lists various scattering and diffusion constants for natural (metallic) Uranium.

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OFFICE FOR EMERGENCY MANAGEMENT

NATIONAL DEFENSE RESEARCH COMMITTEE

OF THE

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IRVIN STEWART, Executive Secretary

~~XXXXXXXXXXXXXX~~
WASHINGTON, D. C.

ADDRESS REPLY TO
2101 CONSTITUTION AVENUE
WASHINGTON, D. C.

~~SECRET~~

December 12, 1944

MEMORANDUM

To: Major R. R. Furman

From: Paul C. Fine

Re: German Publications

The following are some comments on the material you gave me yesterday.

1. The University of Strassburg catalog for the winter semester of 1944-45 shows [Carl Friederich von Weizsacker in charge of theoretical physics. Rudolf Fleischmann is down for a course of two hours per week on the "Physics of the Atomic Nucleus" and an all-day course giving an "Introduction to Scientific Work in the Research Institute of the Medical Faculty." Helmut Harms in the physical chemistry department is listed for a one-hour course on "Chain Reactions and Explosive Processes."]

The Strassburg catalog states that there were 3462 students enrolled in the summer semester of 1944. There were 722 in philosophy, 485 in Government, 572 in Science and 1683 in medicine. Of the total number, 618 withdrew. There were 1363 women students.

2. The catalog of the Ruprecht Karl University in Heidelberg lists [Wolfgang Gentner as giving a course in "Nuclear Reactions and Artificial Radioactivity" and a "Seminar on New Work in the Field of Nuclear Physics."] August Becker is down for a course in "Radiation Physics for Science and Medical Students." Heinz Maier-Leibnitz is listed for a course on "Cosmic Rays." Walter Bothe is shown as an Honorary Professor of the University and Director of the Physical Division of the Kaiser Wilhelm Institute for Medical Research in Heidelberg.

3. The booklet on "Physics" by Prof. Dr. Wolfgang Finkelnburg of Strassburg University was published in Freiburg im Breisgau in 1942. On page 30, [Werner Heisenberg is referred to as "Professor of Theoretical Physics in Leipzig."] A statement is made that "If we consider that German

FOR VICTORY BUY UNITED STATES WAR BONDS AND STAMPS

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By [illegible] NARS, Date 4/13/76

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theoreticians have also had a decisive part in the fundamental theories of nuclear physics -- for example, Heisenberg with his theory of the structure of the nucleus from protons and neutrons -- then we recognize what an important and powerful weapon German theoretical physics represents in the research contest for science and technology." On page 32, the following is said:

"Nuclear physicists have succeeded in transforming atomic nuclei one into another, in building them up and tearing them down (atomic disintegration), and thereby have realized the old daydreams of the alchemists to transform chemical elements one into another, even if this has been done only in the smallest amounts up to now. Still we do not know the details and quantitative laws that control events within the atomic nucleus, but there is growing daily an abundance of the knowledge that must form the basis of exact nuclear theory and the number of applications is also growing -- one has only to think of artificial radioactivity. The technical utilization of the collosal energy concentrated in the atomic nucleus is to be sure only a daydream at present, but of fundamental significance is the experimental evidence produced by nuclear physics of the transformability of mass into energy and vice versa. It is characteristic of the inner relations of science that nuclear physics has also made possible the solution of the old problem of the energy economy of the sun and fixed stars and thereby reaches far out beyond its own more narrow realm. It is indeed possible to find nuclear reactions by which energy is set free in the interior of the sun in a manner similar to the burning of coal in our stoves."

4. The article on "The Atom in Physics, Chemistry and Philosophy" by C. P. v. Weizsäcker in the Berlin publication Das Reich for 14 June 1942 is elementary and philosophical in nature and of no particular interest.

5. A cursory inspection of the recent German newspapers from Strassburg and Karlsruhe reveals some articles on V-2 but nothing else of particular interest.

It is suggested that recent catalogs of other German universities might be of interest in indicating the academic activities of various physicists. Presumably, these are available at the University of Strassburg.

Paul C. Fine
Paul C. Fine
Technical Aide
NDRC

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EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS MISSION

~~SECRET~~

8 December 1944.

SUBJECT: TA - Strassburg Mission.

Dr. Richard C. Tolman,
National Defense Research Council,
Washington, D.C.

Dear Tolman,

The inclosed report was put together in very great haste in order that Lt. Colonel Pash could carry it with him. All the essential facts are included, but we have many more documents.

A report or a personal conference at a later date will give you a more comprehensive picture of our findings at Strassburg.

Sincerely,

/S/ S. A. Goudsmit

D.R. S. A. GOUDSMIT,
Scientific Chief.

Incls:

1 - Report by Dr. S. A. Goudsmit and Mr. F. A. C. Wardenburg, dated 8Dec44, subject: TA - Strassburg Mission, with EXHIBITS as follows:

"A" - Ltr. dtd 12 June 43 from Weizsäcker to Heisenberg
"B" - " " 18 Aug 44 " Höcker to Heisenberg
"C" - " " 13 Apr 40 " Weizsäcker to Joos
"D" - " " 15 Aug 44 " Weizsäcker to Heisenberg (excerpt)
"E" - " " 29 Jan 42 " Groth to Fleischmann (excerpt)
"F" - " " 27 Mar 44 " Diebner to Weizsäcker
"G" - " " 7 Jul 44 " Hocker to Diebner
"H" - " " 26 Jul 44 " Hocker to Diebner
"I" - " " 16 Jun 43 " Weizsäcker to Heisenberg.

trans by R.C. Fine & W.A. Shurcliff Dec 1944

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Authority NND 760136
By PN NARS, Date 4/13/76

HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

~~SECRET~~

8 December 1944

SUBJECT: TA - Strassburg Mission

Following is a preliminary report of information gathered as a result of the recent mission to Strassburg. Practically all the following intelligence is based on direct evidence from documents.

Scientific activities in Germany are directed by a national research committee, the Reichsforschungsrat (RFR). The organization was originally under the Minister of Education - Rust. About a year and a half ago it was placed under Goering. The Reichsforschungsrat is divided into various departments. A department for nuclear physics is headed by a position called "the Reichsmarshall's Deputy for Nuclear Physics", (Bevollmächtigter des Reichsmarschalls für Kernphysik). This position was originally held by Esau but is now held by Gerlach. During Esau's incumbency the address was:

Berlin-Charlottenburg 2
Werner-Siemens Strasse 8-12

At present, under Gerlach the address is:

Berlin - Dahlem
Boltzmannstrasse 20

A branch of this department is known as the Institute for Nuclear Measurements (Institut für Kernphysikalische Messmethoden) and Kurt Philipp is in charge. This institute is located in Posthalde (Post Hinterzarten) im Hoellental. It was formerly part of the PTR. The administrative head of the nuclear physics branch of the RFR is Dr. Diebner, another member is H. Beuthe.

The RFR assigns research projects to various universities and individuals, allocated funds, establishes priorities, and handles all personnel matters including draft deferments.

The Kaiser-Wilhelm Institut for Physics has been in part moved to Hechingen, Hohenzollern, No. 1 Weiherstrasse. The Telephone No. is 405, and the cable address "Kaiserphysik Hechingen". The institute was located at Hechingen as early as October 1943. Among the personnel known to be working there are Heisenberg, von Weizsäcker, Höcker, Jules Hiby, G. Moliere, Wirtz, Frl. Dr. B. Gysae, (Librarian). As far as could be discovered the Hechingen group is entirely concerned with theoretical nuclear physics. No definite evidence was found at Strassburg of experimental work at Hechingen but reports received from OSS in Switzerland have indicated that this may have

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~~SECRET~~

Alsos Mission

been going on in nearby Bisingen, where a new cyclotron is being built.

A section of the Physikalisch-Technische Reichsanstalt has been evacuated to Ronneburg in Thüringen, Bachgasse 8 (According to a post card written by Houtermans, dated March 1944) which mentions that he is working with Geiger counters.

Uranium figures prominently in the work being done at Hechingen. Reference is made in correspondence to the "U-Frage" and to the "U-Sache" (Exhibits A, B. C). Calculations have been found on the uranium problem. Frau Haas, who was secretary to Finkelenburg and von Weizsäcker, remembers writing a report for Dr. Höcker, von Weizsäcker's assistant, containing mostly calculations and mentioning uranium in "Kugeln" and "Schichten", i.e., in spheres and layers. We believe we have found the letter accompanying these computations (August 1944 - Exhibit B).

No reference whatsoever was found made to thorium.

The connection of Degussa and Auer with the project is indicated by a
43 letter dated June 12, 1944 from von Weizsäcker to Heisenberg from which the following is quoted: Corrected later to 1943 (see Exhibit A)

> "Bothe called Degussa in my presence and he was informed in confidence that they had successfully cast one or two large plates, and on instructions from Auer had started production of cubes. For which of the two productions the large furnace is to be used they still await information from Auer."

Examination of rather voluminous personal correspondence found in von Weizsäcker's office revealed that only a portion of his time, at least until very recently, was devoted to project matters. He had conducted courses at the university and frequently lectured at other universities and in other cities, in and outside of Germany, including Lisbon, Madrid, Paris, Helsinki, and Copenhagen. He is an intimate friend of Heisenberg and they use the familiar "du" in conversation and correspondence. Both Heisenberg and von Weizsäcker were described by Frau Haas as being men of personality and character and probably not sympathetic at heart to Nazi ideals and methods.

The lack of secrecy in Germany with regard to nuclear physics matters is striking. Letterheads and envelopes bear the title of the Reichsmarshall's Deputy for Nuclear Physics and stationery for the KWI for physics at Hechingen carries the complete address. According to the OSS in Switzerland, an envelope of the KWI Physics of Berlin was mailed into Switzerland bearing a Hechingen post mark.

In a draft deferment request for an assistant, the name of the project is given as "the production of energy from uranium". The priority is indicated as "DE". For this type of work there are only three priority ratings:

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Subject: TA - Strassburg Mission - Con'd. 8 December 1944

They are:

"DE" - Dringende Entwicklung (highest priority)
"SS" - Sonder Stufe
"S"

At present only work with at least "SS" priority can be pursued.

No evidence was uncovered of any uranium work on a production scale. One reference mentions "Grossversuche", large scale experiments. Another the "Gottower" experiment by Diebner (July 1944) computations for which were made by Heisenberg. Gottow is a village 30 miles south of Berlin.

In a secret document dated July 1940 Fleischmann proposes to separate the uranium isotopes by a method originated by Urey (Journ-Cehm. Phys. 7, 34, 1939) using liquids instead of gas, namely a layer of Uranyl nitrate dissolved in water moving against a layer of an ether solution.

A letter from Dr. Will Groth at Hamburg (January 1942) states that Harteck requested him to furnish Fleischmann with all details of the nickel valve membrane mounting. Groth also mentions to have heard that F. has had the same disappointments with UF_6 as Groth because of its nasty properties.

In May 1941 Fleischmann received a letter from Mattauch about Nier's apparatus (Rev. Sc. Inst. 11, 212, 1940) for U-isotope separation with UF_6. The KWI for chemistry was too busy to construct parts for Fleischmann. Clusius was building a similar apparatus. Joos was planning to construct such apparatus later on a commercial scale.

Late 1939 the KWI for chemistry was offered melted uranium metal, practically oxygen free, at about 850 marks per kilogram, by the firm of Carl Schärtler and Co., Wiesbaden, P. O. Box 21.

The Forschungsanstalt of the Reichspost early in 1942 started the construction of an ultra-centrifuge for isotope separation under the direction of Bobke and Schmidt.

Copies of some of the more important documents found are inclosed. After further study of all the numerous documents brought from Strassburg, copies of additional documents will be forwarded together with supplementary reports.

/S/ S. A. Goudsmit
Dr. S. A. GOUDSMIT
Schientific Chief

/S/ F. A. C. Wardenburg
MR. F. A. C. WARDENBURG
Expert Consultant

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12 June 1943

(from) Prof. Dr. C. F. v. Weizsäcker

(t) Professor W. Heisenberg
Kaiser Wilhelm Institute for Physics
20 Boltzmann Street
Berlin - Dahlem

Dear Werner!

Many thanks for the letters from you and Bopp. Concerning the minutes of the meeting that we received from Esau, Höcker himself has rather lost his temper because they create the impression of a disagreement between you and him that does not exist at all. I have now written to Esau about it and have had Höcker exactly formulate his viewpoint once again.

Last week I was in Heidelberg and discussed the matter with Bothe also. In my presence, Bothe called the Degussa Co. which confidentially advised him that they had successfully cast one or two large plates and as a consequence, on instructions from the Auer Co., are going over to the production of cubes. The decision of Auer is still awaited as to which of the two productions is to make use of the large furnace. Your ideas of a transfer to South Germany I find quite illuminating. I am still wondering where we could find a suitable location with the necessary buildings.

I thought I would be in Berlin from July 2 to July 6, inclusive. To be there longer during the semester would be possible but difficult. Perhaps these five days will suffice for the most necessary discussions.

With cordial greetings

Yours

[Translation of Exhibit "A"]

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SECRET

(from) Dr. K. H. Höcker

Strassburg 18 August 1944

(to) Prof. Dr. W. Heisenberg
1 Weiher Street
Hechingen (Hohenzollern)

Dear Professor:

I send you herewith a tabular summary of the quantity ν in the neighborhood of its maximum for solid and hollow spheres. For solid spheres the maximum has been displaced somewhat from the previous value, in the direction of smaller dimensions. That seems to me understandable since the multiplication factor no longer increases so rapidly with the increase in size of the U-pieces, the smaller spheres and thinner layers being relatively better disposed. Prof. v. Weizsäcker considered it desirable that I communicate to you the course of the calculation in separate stages in order to facilitate an eventual comparison. The table for hollow spheres differs from my earlier one only in being somewhat more complete. The difference between hollow and solid spheres turns out to be not very great here. In the whole calculation are inserted the numbers you specified: X = 1.18, Y according to diffusion theory, w with c = 0.0097 corresponding to the layer formula in your evaluation of the Dahlem large-scale experiment. I have used the old w - formula for the rest.

Very truly yours,

/s/ K. H. Höcker

[Translation of Exhibit "B"]

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Alsos Mission

SECRET

(from) Dr. C.F. v. Weizsäcker

13 April 1940

Registered

(to) Professor Joos
Second Physics Institute of the University
Bunsen Street
Göttingen

Dear Professor!

We have already carried through the calculations which you proposed for carbon. On the assumption of a density of 18 for P38 [Translator's note: Presumably U^{238}] and 1.8 for C and a simple cross-section of $3 \times 10^{-27} cm^2$. for the C nucleus, the calculations led to the essential dimension of the machine [Translator's note: Presumably a pile], which is roughly a cube two meters on an edge.

Since in these calculations very favorable values of densities were used, and since moreover the assumed effective cross-section may well be off by a factor of 2 or more (but must be less than 8×10^{-27} cm^2 if the infinite machine [Translator's note: Presumably a pile] is really to function), we have not carried through the calculations for other numerical values and also have not tried to determine the most favorable arrangement. It seems to us much better first to wait for the experimental results on carbon. When the work is written up, it will be sent to you as usual.

With best greetings

Yours very truly

(signed) C. F. W.

[Translation of Exhibit "C"]

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[Translation of "fragment of torn-up letter definitely written by von Weizacker and intended for Heisenberg"]

Strassburg
August 15, 1944

Dear Werner

My wife will explain to you why I . . . . . I think that in about ten days with . . . . . will come for a few days.

With regard to the U-matter . . . . . other report, Höcker will write you in the immediate . . . . final values.

Turning next to the theory of the hollow sphere: I wrote you only recently that your expression:

$$\frac{(X_1 - Tg\, X_1)(1 - X_0\, Tg\, X_0) + (X_0 - Tg\, X_0)(X_1\, Tg\, X_1 - 1)}{X_0 - Tg\, X_0 + Tg\, X_1 (1 - X_0\, Tg\, X_0)}$$

is equivalent to the simpler expression:

$$X_0\, Lotg\,(X_1 - X_0 + \vartheta_0) - 1 \quad with \quad X_0 = Tg\, \vartheta_0$$

This is valid however only for $X_0 < 1$. For $X_0 > 1$ it follows (instead of the above that

X_1 Lotg $X_1 - 1$ should be replaced by:

$$X_1\, Tg\,(X_1 - X_0 + \vartheta_0) - 1 \quad with \quad X_0 = Lotg\, \vartheta_0$$

As I see it, the last expression is mathematically different from your complicated expression.

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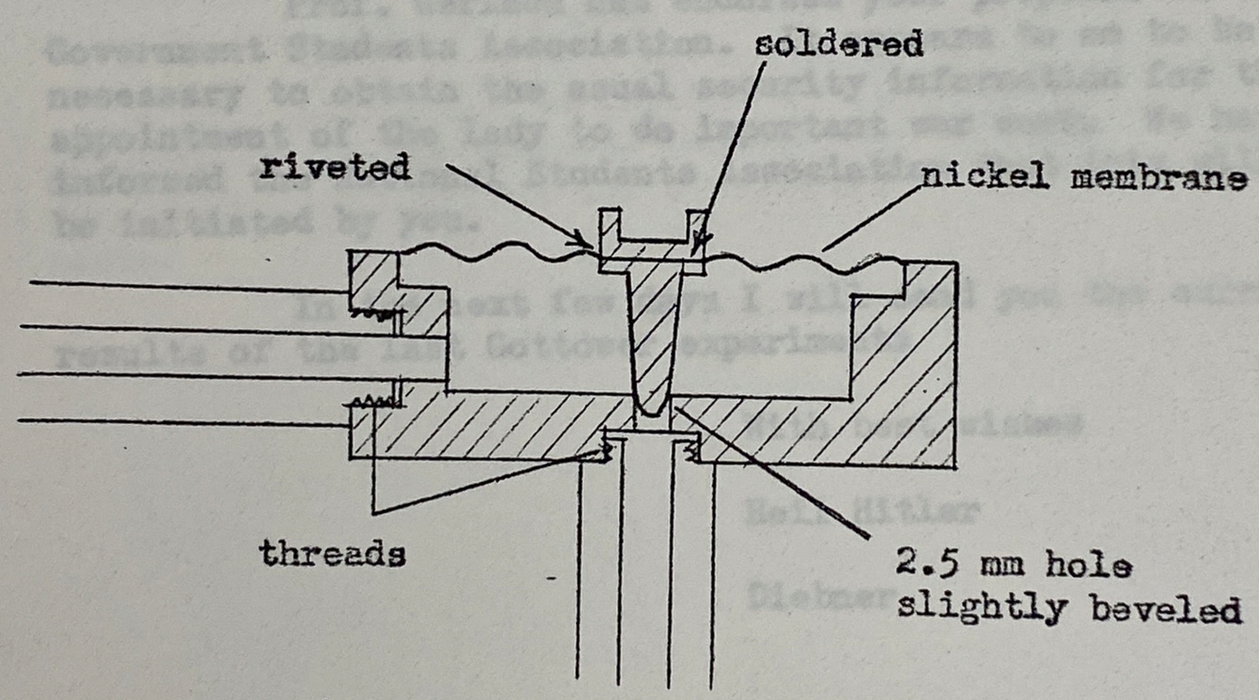
[Translation of Exhibit "D"]

SECRET

[Translation of "Excerpt of a letter from W. Groth in Hamburg to Fleischmann, Jan. 29, 1942"]

The nickel membrane has been pressed [printed?, German word is gedrückt] in our shop and has been soft-soldered to the nickel cylinder. The diameter of the bored hole which receives the nickel cone is only 2.5 mm. Its rim is slightly beveled with a steel tool having the same taper as the cone. The inlet and outlet tubes were attached mechanically by means of threads and then soft-soldered. We have occasionally drawn a hot brass collar over the outer turned-down edge of the nickel membrane.



[Translation of Exhibit "E"]

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SECRET

(from) National Research Committee
The Reichsmarshall's Deputy
for Nuclear Physics

20 Boltzmann Street
Berlin - Dahlem
27 March 1944

Telephone: 763244/45

File number 256.44 RFT

D/W

(to) Prof. C. F. v. Weizsäcker
Institute for Theoretical Physics
3 University Street
Strassburg, Alsace

Dear Mr. von Weizsäcker!

Prof. Gerlach has endorsed your proposal to the Government Students Association. It appears to me to be necessary to obtain the usual security information for the appointment of the lady to do important war work. We have informed the National Students Association that this will be initiated by you.

In the next few days I will send you the current results of the last Gottower experiments.

With best wishes

Heil Hitler

Diebner

[Translation of Exhibit "F"]

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July 7, 1944

~~SECRET~~

(from) Dr. K. H. Höcker

(to) The Government Councillor Dr. Diebner
20 Boltzmann Street
Berlin-Dahlem

Dear Dr. Diebner:

In connection with our conversation in Freiburg I give you here the number of our postal checking account: Strassburg 13015 (Professor Doctor von Weizäcker, special account for research work). I would like to ask you to transfer 4000 Reichsmarks to us in this account as soon as possible.

Furthermore we request a copy of Heisenberg's analysis of the new Gottower experiment, which we need for our calculations and for preparing the experimental parts.

With best wishes,

Your

[Translation of Exhibit "G"]

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26 July 1944

(from) Dr. K. H. Höcker

To the Reichsmarshall's Deputy
for Nuclear Physics
20 Boltzmann Street
Berlin - Dahlem

Dear Dr. Diebner:

I asked you some time ago about the assignment of a sum of 4000 reichsmarks to our postal checking account Strassburg 13,015 (Prof. von Weizsäcker, special account for research work), so that we can make good our obligations for the coming month. May I remind you once again about sending the Heisenberg calculation on your experiment?

With best wishes

Yours

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[Translation of Exhibit "H"]

SECRET

16 June 1943

(from) Prof. Dr. C. F. v. Weisäcker

(to) Professor Heisenberg
Kaiser Wilhelm Institute for Physics
20 Boltzmann Street
Berlin - Dahlem

Dear Werner!

It seems to me that Höcker has in the meanwhile cleared up the difference between the calculations made by him and my earlier calculations — the discrepancy amounted to about 100. At that time I had tentatively used too small a value for the effective diffusion path length and my results can no longer be corrected by substitution of the new value. Since the diffusion path length in D20 depends practically exclusively on [word or symbol omitted?], the aspect neglected leads to an error which accounts for the difference between Höcker and me.

With best wishes

Your

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[Translation of Exhibit "I"]

SECRET

Subj: Preliminary Hasty Note on Strasburg- cont'd. 4 December 1944

The contents of circular and letter indicate some difficulties regarding deferment, but we are unable at present to evaluate how serious these were.

c. A filled out blank, dated 11 August 1944, signed by Von W. asking for draft deferment for an assistant named Franz Mosser.

As research subject is given:

Forschungsauftrag SS 4891-0659 (2363/11)-II/44

Teil des Vorhabens DE 811-RFR-III/44 - 12/44

Energieerzeugung aus Uran

Note: SS plus number indicates priority grade, namely "Sonder Stufe", which now is one of the lowest priorities.

d. Typewritten Tables concerning computation of cross sections for neutrons of carbon, ordinary and heavy hydrogen, oxygen, uranium. The title is:

"Zusammenstellung von Daten für die Theorie der Uranmaschine".

There were five copies of these tables. There was also found a small sheet of simple computations for these tables, possibly but by no means certain, in Von W's own handwriting.

5. Evaluation of documents found in Von W's office.

Biot had the impression that these few papers were misfiled or mislaid and thus fell in our hands, all other relevant material had been removed.

Note, however, (i) that none of the above mentioned papers were classified,
(ii) the official letterhead mentioning "nuclear physics".
(iii) that the draft blank mentions "Energy Production from Uranium".
(iv) the low priority "SS".
(v) the open postcard with address and the mention of "counters."
(vi) that the tables refer to the "Uranium engine".

These observations, together with the fact that specialists could be captured in Strassburg and together with information gathered earlier at Eindhoven and by OSS in Switzerland, shows that there exists no concentrated effort on the Uranium subject in Germany. The interest seems to be primarily on an academic research level and is directed towards energy production rather than the construction of an explosive.

The widespread interest in nuclear physics, so as even to include a crank SS-man like Böttcher (see Eindhoven Report) is quite significant. Somehow it seems that all those who work on nuclear physics expect special privileges

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HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

4 December 1944

TO : Tolman

FROM : Goudsmit - Hq 6th Army Group

SUBJECT: Preliminary Hasty Note on Strassbourg

1. Special praise for the military chief. After definite indications that all targets had disappeared Lt Colonel Pash' patience and skill lead to the discovery of Fleischmann, Maurer, Neuert and some secondary physicists and chemists. (See my recent informal letter to Colby).

2. Lt. Biot, USN (of "Karman and Biot" fame) who was specially instructed for the occasion, accompanied Major Furman and recovered a few significant papers from Von Weizsäcker's office. He himself had left a few months ago.

3. Mr. Wardenburg and Dr. Goudsmit are now halfway to Strassburg for complete investigation.

4. Analysis of documents recovered by Biot and Furman:

a. Postcard from Houtermans to Von W.
date 18 April 1944
It mentions that his section of the P.T.R. (Bureau of Standards) has been evacuated to Bachgasse 8, Ronnelburg (Thur), where he continues work with counters. (Compare Eindhoven report).

b. A circular and a letter on assistants' draft deferments, dates 7 January and 8 February 1944.

Important is the letterhead:

Reichsforschungsrat

Der Bevollmächtigte des Reichsmarschalls

fur Kernphysik

Staatsrat Professor Dr. Esau

Berlin-Charlottenburg 2, Werner-Siemens-Strasse 8-12
F.30 06 21

On the letter the name of Esau was crossed out and added in typewriting:

Prof. Dr. W. Gerlach
Berlin-Dahlem, Boltzmannstr. 20
Tel 76 32 44/45

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By PN NARS, Date 4/13/76

[Translation of Exhibit "C", Alsos Strassburg Mission, 15 Dec. '44]

SECRET

4 September 1941

To the

High Command of the Army

WaF I

Berlin W 35
72-76 Tirpitz-Ufer Street

The following announcement came to my attention through the Press Division of the Foreign Office:

Stockholm, as reported by "Transozean-Innendienst" [Translator's note: A German news agency]:

In the United States scientific experiments are being made on a new bomb, according to a report from London appearing in the Stockholms Tidningen [Translator's note: A Stockholm newspaper]. The material used in the bomb is Uranium, and if the energy contained in this element were released, explosions of heretofore-undreamed-of power could be achieved. Thus a five-kilogram bomb could create a crater 1 kilometer deep and 40 kilometers in radius. All structures within a range of 150 kilometers would be demolished.

Dr. C. F. v. Weizsäcker

Translations of Exhibits C & L made by P.C. Fine & W.A. Shirolitt

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Leak of U.S. atomic work

from the German government, perhaps merely draft deferment or financial support. The word must have gone around that it is important but the various efforts appear to be independent and perhaps uncoordinated. Note that the "Reichsmarschall's delegate-chiefs on nuclear physics, Esau and Gerlach are not nuclear physicists themselves.

These Comments, based on evidence at hand, are of course still premature and may well be found wrong later.

DR. S. A. GOUDSMIT
Scientific Chief

SECRET

HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

6 December 1944

SUBJECT: Preliminary Hasty Note on Strasbourg

TO : Major General L. R. Groves, 5119 New War Building, Washington, D. C.

At request of Major R. R. Furman, the attached copy of report prepared by Dr. Goudsmit, is forwarded herewith.

For the Chief of Mission:

GEORGE R. ECKMAN
Lt Col, MI
Deputy Chief

1 Incl. - as indicated

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Authority NND 760136
By PH NARS, Date 4/13/76

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NOTES BY FLEISCHMANN ON A CONVERSATION WITH MEISTER 29/1/44

Conversation at Saarbrücken with Herr Meister from Elin, whom I met accidently at Restaurant Zimmermann.

Cyclotron magnet: The discussions with the Firm (Elin) have come about because they had received our order to make 800 anti-aircraft cannons. At a meeting of the Director which took place in August or September, the (temporary) director (Hofrat Mandi--- is also engineer and builder of railways), had received the contract and at that time the Cyclotron was set aside. He says, "the officials who set it aside did not have a clear idea what one could do with the cyclotron. This uncertainty (accounts for) the cautious and dilatory behavior. It is now really not a question of the production of artificially radioactive material but rather of the Death Ray problem." (Evidently the gentleman in Vienna means the U machine. Herr Meister has heard rumors of this and he, or others, has painted it up.) The Project of the magnet could be completed in about 14 days. Since the work can be undertaken only after they have received a directive, the project can be completed only when they have an order from higher authorities. Herr Meister said: "If you present a letter from a high level which will request the work, then it can be done."

Incl H

NOTES: Made by Fleischmann on a conversation with Gladenbeck at the Mathematical Institute at Heidelberg on 1 August 1942 at 1:00 P.M.

"Gladenbeck has spoken with Ohnesorge while he was in a good mood. O. said to Gl., we (The Post) could withdraw in favor of the German Air Ministry, we could make a gesture. (Gl. remarked that there is a slight tension between the Post and the Air Ministry). Ohnesorge believed, they (the Air Ministry) have heard of our plans and now the Reichsmarshall is behind it all. Would that they had undertaken sooner and got it underway, nuclear physics can have important applications.

I said, there is no one behind it. At the opening of the University of Strasbourg, I met Dr. Lorenz, and heard that they had been interested in Nuclear physics. We (Bickenbach and I) had considered a problem with radio-active indicators and had received a research contract. For this we need a neutron generator. We have asked for it.

Gladenbeck recommends to write to the Minister, saying that we shall get later delivery because of the installation for the Post, next saying we are planning primarily medical applications (thus not in competition with the Post) that we want to work on war material problems (thus problems which possess acute interest). If the minister says no, we are in the same position as now. It can however well be that he says yes.

Dr. Otterbein, director at Zeuthen,--as Gladenbeck says,--certainly does not use prestige politics. He recently said to Gladenbeck that he would not like to have his institute enlarged so quickly and so suddenly. Otterbein would certainly concur in an extension of the delivery period.

I said, is this sufficient? Gl. said, no, the minister must agree. Thus in any case a letter to the minister.

Last Tuesday, Ardenne was with Ohnesorge. Ohnesorge understands communications technique better than nuclear physics. Thus he arrives at fantastic ideas. In his conversation, Ardenne did tone him down continually; he had always to repeat, it won't go so fast, one doesn't yet know at all, whether it will go (the machine), etc.

Ohnesorge has also talked about the machine once at the "Tafel des Fuhrers" 1 KG. U--so and so much energy and converted the value into explosive power.

The Post is building two (2) cyclotrons, one for itself, one for Ardenne. Ardenne has a Vander Graaff.

The Elin works are working full speed. That they don't answer is because they don't know if they can reveal anything, because the drawings, etc. were given to them as "top secret" (Geheime Kommandosache).

Dr. Otterbein will certainly let me have the drawings, and he will give the Elin works permission to undertake our project. Gl. will phone Otterbein about it.

Incl B

C O P Y

Transcription of Passage in Fleischmann's notes on his trip to Berlin on 1 and 2 June 1942 to obtain support for a Cyclotron for Strassburg.

Visit to Dr. Schieber, Munitions ministerium, Rüstungslieferungsamt, Pariser Platz 3. (1 June about 19:20 to 19:50)

My letter reached him only today (1 June).

Q. If we want to put the emphasis on research or application.
A. Today naturally, on the most promising and important application.

Q. Is the principal application for energy or explosives?
A. Energy.

Q. Also explosives?
A. Difficulties pointed out.

Q. Doesn't it go off by itself?

I. It can be controlled with an n-absorber. Principal use, for example, ships with a large cruising radius, further relief of the energy economy.
HE. You emphasize medical applications. Should they not be postponed today? In view of the public health.....there are more important things today.

I. Ready to work on the most important and promising; but note ('between us'), we are thinking about radioactive dyestuffs, a new method.....Contagious diseases (spotted fever) can also be decisive in the war. Medical knowledge can have very important results. Entirely new research methods possible; for example, the following has already been done: capsules soluble in the intestines and filled with NaCl are traced from the outside because of the radiation. I am afraid of unforeseeable consequences if it is decided in advance to make no use of these processes.
HE. An important question for defense. Can a bomb be detected from a distance by its radiation in case the others have it first?
I. No answer.

With this and some other questions he referred to questions put by the minister. The minister had said that the material, including the copper, for the cyclotron could well be made available.

Incl C

SECRET

FLEISHMANN'S NOTES ON A CONVERSATION WITH BOMKE

20/6/44

Bomke is here. After the lecture in the Psychological Institute I met him in Hallock's room. Bomke is now with the F.F.O. and lives in Herrsching on the Ammersee. The F.F.O. is located at a flying field which has been bombed repeatedly. The Institute has not been damaged, however, except for broken windows, since the buildings lie on the opposite side of the field. Bomke and his men have evacuated to a site about 20 km. distant from Oberpfaffenhofen. The greater part of F.F.O. has done likewise. He said I should cross my fingers that they should not have to move to Strasbourg. Diekeman was retired to inactive service about two weeks ago "for reasons of health" (He had a cold). But he left a short time before when Esau announced himself Plenipotentiary for High Frequency. So there is at present no director of the Institute but there are several who have their eyes on the position. There are several possibilities if the Institute has a number of remote locations. They are then somewhat independent and the department leader has the status of a director. Therefore the head men of the institute favor the evacuation to Strasbourg. The under men do not favor it since they are already settled in the vicinity of Oberpfaffenhofen. Bomke says he has a great deal of fine mechanical work done by small firms in Munich that do excellent work. He would lack this facility. The mechanics whom he would take along would be amateurs and not regular professional mechanics. This he would not like. He does not see any necessity for the evacuation. The plan is not to bring certain entire departments here but to take parts of them and leave the rest behind. The store of material (?) is in Oberpfaffenhofen. There is nothing here. One will always point out an activity so that it can be said - - - - - - - - - - -
It really makes no difference.
To my question about the organization relations between FFO and LFM he replied, they have two men, the one is Bäumker, the other is Esau. Bomke repeated that Bäumker is the actual leader of the Forschungs Führung. To my remark that Georgii is the leader, Bomke replied that apparently Bäumker and Georgii are on such good terms that Georgii turns everything over to him. Bäumker formerly had become the leader of Forchungs Führung under Udet and, at Udet's death, had to go. However, he came off very well and is now the head man in FFO. (I asked then about Diekemann and heard of his retirement to inactive duty). In answer to my question, Bomke said that Bäumker had three Institutes, LFM., F.F.O. and still another over which he presided. He said further that Lorenz and Rössler had really nothing to say. The man who has something to say is Bäumker (!), I said: "And Georgii"? He replied: Bäumker and Georgii have apparently very close relations. (See above) Who in the Institute will be leader is not yet - - - - - Three men are possibilities:

(1) An officer -------, a Captain
(2)

Already a return removal is being considered. The works in Oberpfaffenhofen and vicinity (the evacuation sites in the neighborhood) will be permitted to remain, otherwise things will be left as before.

Incl 5

Bomke thought, if the Strasbourg section were once here, then he would draw other parts to it and finally a large number of works would need to be built since otherwise there would not be room enough. Then it would no longer be secure from bombs.

The FFO works on a Radio location program. (Funk mess programm). (Therefore not on a Jäger program)

December 2, 1944.

Subject: Strasbourg

To: SAG

1. General:
The sudden assault on Strasbourg has resulted in some unusual conditions. Germans who have had plans to leave were caught there and are still in the city. Equipment and papers were not always carefully and completely removed or distroyed. The major work, however, was able to be removed accordign to a plan in operations for a long time.

2. Physics Lab:
Generally being renovated throughout. Workmen were probably there up until the French came. Particular attention was being given to new electrical wiring, wall panels, electrical loads. There were specially equipped rooms in the basement. It is evident throughout the bldg that prior to the renovation large amounts of equipment had been removed to another location.

The entire bldg was examined. Fleishmann had no office there. Von Weisacker had left for Bopfingen, but his office appeared to have been used on visits. Hocher had left for Nordlingen. Both Von Weisacker and Hocher left approximately four months ago. Finckel--- , was apparently engaged in administrative work of the Dept and appears to be of no interest form the scientific ide.

3. The Hospital:

Weygand, Neuert, Maurer, Busman, Vogelbach, Wacker,
chem phy phy phy chem tech

took refuge there. Fleishman conducted his research there. Not long ago a special bldg witha cascade had been costructed on the hospital grounds for the nuclear research, presumably for medical research but very likely to be used also by those assigned war research problems.

4. The Fort:

A fort near Strasbourg was the site of important reasearch, the exact nature of which is unknown. The University had files on this work, however . It can be assumed that the Fort and the University were connected.

5. The University:

The administrative German direction is for the most part available. Some are being held b the French.

6. Recommendations:

We stand very secure at the moment. Fleishamnn can be asked to write a report. It may be that he and the others were not engaged in war research themselves, but can tell what they know aboutit, what the main research problems were, the priority, etc. In this case they can be turned over to whatever group are taking and holding German nationals. Neuert, and Maurer have both published papers in the project field as I recall. They may be of interest.

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EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

11 September 1944

SUBJECT: Transmittal of Target Information

TO : Major Robert R. Furman

1. Submitted herewith is a report prepared by Dr. Goudsmit.

2. It is Dr. Goudsmit's recommendation that this information be disseminated to interested agencies. No dissemination has been made by this office other than to have a copy furnished Major Calvert.

BORIS T. PASH
Lt Col, MI
Chief of Mission

1 Incl:
Sub: Heisenberg et al, War Research by Physicists - dtd 9 September 1944.

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By ..... NARS, Date 4/13/76

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EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

9 September 1944

SUBJECT: Heisenberg et al, War research by Physicists

Heisenberg edited a book on Cosmic rays in the fall of 1943. It was dedicated to the Professor A. Sommerfeld at the occasion of his 75th birthday.

The title is "Vorträge über Kosmische Strahlung" (Springer 1943) The subject matter was entirely cosmic rays, a compilation of informal lectures at the Kaiser Wilhelm Institut für Physik during 1941 and 1942.

Of interest are only some statements in the introduction and the list of authors, apparently all collaborators of Heisenberg.

List of Authors:

W. Heisenberg, K.W.I.F. Physik, Berlin-Dahlem
K. Wirtz, Do
E. Bagge, Do
G. Moliere, Do
S. Flügge, Berlin, no institute given!
F. Bopp, Breslau, temp. K.W.I.F. Physik
A. Klemm, K.W.I.F. Chemie
H. Volz, Phys. Institute Techn. Hochschule Berlin-Charlottenburg
C.F. von Weizsäcker, University Strassburg
J. Meixner, Technische Hochscule, Aachen.

Translation of first paragraph of introduction by Heisenberg:

"The research on cosmic rays suffers especially from the unfavorable circumstances of the present day. For on one side it must obviously be suppressed in favor of other problems in most physics laboratories, on the other hand the information about results obtained in foreign countries has become difficult for lack of communication. Finally extensive articles have not appeared during the war in Germany simply because the physicist, who has his part in the war, can not find time for a work of this sort ....."

Original:

Die Forschungen uber kosmische strahlen werden von der Ungunst der Zeiten besonders stärk betroffen. Denn einerseits müssen sie in den meisten physikalischer Laboratorien naturgemäss hinter andern

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Probleme zurücksteheh, anderseits is auch die information über Forschungrergebnisse, die im Anlandé gewonnen worden sind, durch die fehlenden Nachrichten über mittlung sehr ershwert. Schliesslich sind die ausführlichen Referate im Kriege in Deutschland einfach deswegen nicht erschienen, weil der Physiker, der im Kriegseinsatz steht, zu einer umfangreicheren arbeit dieser art nicht die gert findet .....

Conclusion and remarks:

It is significant that the name of the laboratory with which Flugge is now connected, has purposely been omitted, stating only that he is in Berlin.

The list of authors confirms earlier information about who collaborates with Heisenberg.

The fact that physicists have at all enough time left to write articles on pure science indicates that they are not as intensively engaged in war work as their colleagues in the USA and UK, though the Heisenberg's preface clearly indicates that war work is being done.

DR. S. A. GOUDSMIT
Scientific Chief

COPY
from
THE NATIONAL ARCHIVES
Record Group No. 77

EUROPEAN THEATER OF
OPERATIONS U.S. ARMY
ALSOS MISSION APO 887

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EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

OSRD
Office of Field Service
Received SEP 27 1944
Referred to:
RPC ✓
ATW ✓
LRT ✓
File

16 September 1944

SUBJECT: Progress Report No. 4 - Alsos Mission - France

TO : Chief, Military Intelligence Service, War Department,
The Pentagon, Washington, D.C.

1. Operations of the Alsos Mission are proceeding according to plans. At present, targets in France and Belgium are being exploited. In the very near future it is planned to send one party to Holland and another party to the advanced elements of the 3rd Army to exploit targets which may become available in eastern France and Western Germany.

2. During the first two weeks in September, the Mission operated four field teams in the following areas:

a. One party exploited targets in Belgium (See Progress Report No. 3).

b. A party consisting of Capt. W. J. Cromartie, Dr. C.C. Lauritsen and Dr. C. N. Hickman, accompanied by a representative of the TAF (British) exploited ski site targets in the coastal area of Calais and Ostend.

c. The New Developments Division team had been operating for the last three weeks in the Brittany and Normandy areas.

d. A team engaged in exploiting targets in the vicinity of Paris.

3. In addition to the above teams, representatives of the Navy and other members of the Mission have been exploiting targets in Paris and securing information for further activities.

4. The Chief of the Mission had been informed that in all instances the above teams have been highly successful in securing information of value to the interested agencies. Reports have been forwarded or are being prepared at the present time.

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Authority NND 750112
By CD/SE NARS, Date 25 FEB 1976

/s/ Boris T. Pash

BORIS T. PASH
Lt Col, MI
Chief of Mission

Distribution:
A. C. of S., G-2
Chief, MIS
Col. Nicholas
Col. Gruhn (ASW)
Commander Old (Navy)
Dr. Waterman (OSRD)

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EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS MISSION

OSRD
Office of Field Service
Received SEP 21 1944
Referred to:

16 September 1944

RTC ✓ ✓
ATW ✓ ✓
LRT ✓ ✓
File SLM

SUBJECT: Progress Report No. 5 - Alsos Mission - France

TO : Chief, Military Intelligence Service, War Department, The Pentagon, Washington, D. C.

1. The military situation in Europe necessitates a reorganization of the administrative set up of the Mission. It is not considered necessary to continue a permanent office in London. In view of the fact that Col. Pash and the operating personnel of the Mission will move into combat areas, it is considered advisable to transfer the headquarters of the Mission from London to Paris.

2. It is contemplated that Lt. Col. Eckman will assume charge of the Paris office. All scientists and other personnel in the Mission, arriving from the United States, will proceed immediately to Paris and all activities of the Mission will be centered in that area.

3. In view of the linking of the 3rd and 7th Armies in France and the accessibility of southern France to the Paris area, it is contemplated re-calling Major Ham from the Mediterranean area to Paris, where he will assist Col. Eckman and also serve as liaison officer between forward elements of the Mission and the Paris headquarters. Movement of scientists from Paris to various areas will be under his supervision. Major Fisher assisted by Special Agent Cerame will handle the administrative activities of the Mission in the Mediterranean area.

4. Targets important enough to be secured immediately upon the occupation of an area by assault troops will be acted upon by the operative group, consisting of Col. Pash, Capt. Blake, Capt. Augustine, Lt. Rosenberger and CIC agents assigned to the Mission.

5. The initial operating plan of the Mission must be altered because of developments in the field. New information secured by the Mission is continuously developing new targets and as a result, it is contemplated that with the advance of the troops into Germany, it is going to be necessary to split the operating group into several units. It had been my understanding that the actual operation for the securing of targets would come within the activities of the task force designated by Supreme Headquarters, Allied Expeditionary Forces. However, actual practice shows that

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this can not be true in all instances. Therefore, it may be necessary for the Mission to request combat troops from unit commanders and use these troops to secure the Mission targets. In all instances in the past, this had been possible due to the very fine cooperation of General Betts and General Sibert, Assistant Chief of Staff, G-2, Supreme Headquarters, Allied Expeditionary Forces and 12th Army Group, respectively, and, Colonel Tompkins and Colonel Strangeways, Commanding Officer, "T" Force and "R" Force, respectively.

/s/ Boris T. Pash

BORIS T. PASH
Lt. Col, MI
Chief of Mission

Distribution:

A. C. of S., G-2
Chief, MIS
Colonel Nicholas
Colonel Gruhn (ASF)
Commander Old (Navy)
Dr. Waterman (OSRD)

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EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

OSRD
Office of Field Service
SEP 21 1944
Received
Referred to:

16 September 1944

SUBJECT: Progress Report No. 3 - ALSOS Mission, France.

KTC ✓
ATW ✓
LRT ✓
File

TO : Chief, Military Intelligence Service, War Department, The Pentagon, Washington, D. C.

1. In view of the developments of the operations in the British sector and the availability of certain targets in Belgium, it was deemed necessary to send a detachment of the Mission to Brussels and Antwerp to secure and consolidate the most important targets and to make arrangements for scientific personnel to exploit these targets.

2. Contact with the "R" Force (British Task Force) had not been previously made, nor has the Assistant Chief of Staff, G-2, of the 21st Army Group been given any information about the activities of the ALSOS Mission. Colonel G. Bryan Conrad, Assistant Chief of Staff, G-2, Communications Zone, European Theater of Operations, suggested that he would accompany the party to the 21st Army Group and make contact with the Assistant Chief of Staff, G-2, 21st Army Group.

3. A unit consisting of Lt Col Boris T. Pash, Lt. R. C. Augustine, Special Agents Carl F. Fiebig and Gerald L. Beatson, and interpreter PFC Nathaniel Leonard departed on 6 September 1944, accompanied by Col Conrad.

4. Due to lack of communications and information en route, 21st Army Group was not located that day, and, with the consent of Col Conrad, the party proceeded to Brussells where contact was made with Col Strangeways, Commanding Officer, "R" Force. As on previous occasions, Col Conrad's assistance was extremely beneficial and helpful and was responsible for the immediate cooperation secured from the Commanding Officer of "R" Force.

5. Col Strangeways was told that it was necessary to proceed immediately to Antwerp to secure certain primary targets of the Alsos Mission. Col Strangeways immediately assigned a flight of armored cars of the RAF to accompany the party. This action was taken due to the fact that the road between Brussels and Antwerp was under fire of armed German units and because Antwerp and vicinity was still in the immediate area of enemy activity.

6. Col Conrad, accompanied by PFC Leonard, returned to Paris the next morning; the remaining party proceeded to Antwerp where all necessary targets for the Mission were secured, contact made with Belgium officials and all individuals of interest to the mission in

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connection with the targets.

7. On 7 September 1944, the group returned to Brussels where further contacts were made with the most important personnel connected with the targets and where arrangements were made for the billeting and rationing of the scientific group which was to arrive to exploit the targets. Lt Augustine was left at Brussels to take charge of the activities of the Mission in that area. Col Pash and the two agents returned to Paris.

8. On 9 September, the scientific group, consisting of Dr. S. A. Goudsmit, Col M. B. Chittick, Dr. T. K. Sherwood, accompanied by PFC Leonard, departed for Brussels.

9. During the above operation, the handling of the RAF armored unit by the Commanding Officer, F/O Pontin, and the attitude of the crew of the vehicles was very good and helpful to the members of the Mission.

/s/ Boris T. Pash

BORIS T. PASH
Lt Col, MI
Chief of Mission

Distribution:

A. C. of S., G-2
Chief, MIS
Col Nicholas
Col Gruhn (ASF)
Commander Old (Navy)
Dr. Waterman (OSRD)

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Received SEP 20 1944
Referred to: RTC ATW LRTV DMDL

18 September 1944

SUBJECT: ALSOS Mission Operations - Personnel.

TO : Lt. Colonel B. T. Pash, ALSOS Mission, c/o A. C. of S., G-2, Hq. ETOUSA, APO 887, c/o PM, New York, New York.

1. The inclosed "List of Personnel for ALSOS Mission" prepared by the Office of Scientific Research and Development is forwarded for your information and review. This list supersedes the list of personnel contained in a letter from Dr. W. P. Colby to Dr. Goudsmit, dispatched on 9 September 1944.

2. The selection and pre-shipment processing of scientific personnel has been satisfactorily carried out by OSRD in conjunction with the War Department up to this date. It has now, however, become imperative that you discuss with Dr. Goudsmit the following requirements:

a. If personnel who are ~~are~~ indicated on the attached list as being alerted and ready for shipment are desired, a specific request should be forwarded to the War Department through military channels and should include, if not already obtained, theater clearance and the necessary air priorities.

b. Requests for specialists, who are only available for a limited period of duty, must contain (if OSRD is to honor the request) sufficient pertinent information as to their assignment.

3. It is necessary to the coordination of ALSOS activities here and in the field for Dr. Goudsmit, as Scientific Chief, to consider the requirements listed above. A detailed estimate of the personnel that will be required to exploit targets in Germany should be submitted at the earliest possible date. OSRD has been extremely cooperative, but is reluctant to consider contacting additional personnel unless they are adequately informed as to language qualifications, type of specialists needed, and their specific assignment in each instance.

4. It is recognized that limited administrative facilities, together with the rapid advances of the Allied military forces, have created a

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SUBJECT: ALSOS Mission Operations - Personnel(Cont) 18 September 1944

temporary shortage of military and scientific personnel. The closing of the London and Rome headquarters with a subsequent consolidation of personnel in the new Paris headquarters will alleviate this situation. The current activities of the Mission and the initiative and aggressive action displayed by its military and civilian members is highly commendable, and has occasioned favorable comments throughout the War Department.

5. The submission of scientific reports on activities of the Mission in France and the Low Countries should be given highest priority. If of sufficient importance, a summary of any report should be forwarded to the War Department by radio.

For the Chief, Military Intelligence Service:

W. M. ADAMS,
Lt. Colonel, GSC,
Supervisor, Source Control.

(No incl for OSRD)

cc: OSRD

WAR DEPARTMENT

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WAR DEPARTMENT
WAR DEPARTMENT GENERAL STAFF
MILITARY INTELLIGENCE DIVISION G-2
WASHINGTON

18 September 1944

SUBJECT: Commendation - ALSOS Mission Activities in France.

TO : Lt. Colonel B. T. Pash, Chief, ALSOS Mission, c/o A. C. of S., G-2, Hqs. Forward Echelon, ETOUSA, APO 887, c/o Postmaster, New York, New York.

1. The "Preliminary Report of ALSOS Mission - Paris Entry" dated 1 September has been reviewed and the information contained therein is a source of gratification to this office.

2. Both you and the civilian and military members of the Scientific Intelligence Mission are to be commended for the aggressive action and initiative displayed by the Mission's rapid entry into Paris, and the successful attainment of the primary ALSOS objective in France.

Clayton Bissell

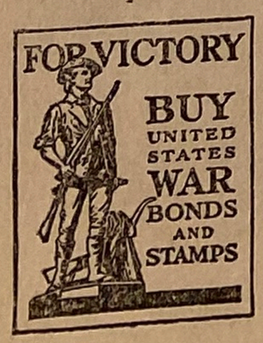
CLAYTON BISSELL,
Major General,
A. C. of S., G-2.

A TRUE COPY

RC HAM - 6 (1 mm)
Lt Col Inf

George R. Eckman (2 mm)

DECLASSIFIED 17/11/81
(see back of document) date



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AUTHORITY: MEMORANDUM FOR Chief, Office of Industrial Security
Contract Administration Services
Defense Supply Agency
Subject: Hoover Institute Declassification Program

Reviewer: EHM

G-2 Secretariat
Register Number
2263

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WAR DEPARTMENT
MILITARY INTELLIGENCE SERVICE
WASHINGTON

20 September 1944

18 September 1944

MEMORANDUM FOR Dr. Edward L. Bowles, Expert Consultant
To The Secretary of War, Room 4E 936:

Subject: Preliminary Report of ALSOS Mission - Paris Entry.

Inclosed for your information and review is a copy of a "Preliminary Report of ALSOS Mission - Paris Entry", dated 1 September 1944.

CLAYTON BISSELL,
Major General,
A. C. of S., G-2.

R. A. OSBORN,
Brigadier General,
Chief, Military Intelligence Service.

Subject:
Ltr. frm Gen. Bissell
dtd 18 Sept. 1944

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(see back of document)

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AUTHORITY: MEMORANDUM FOR Chief, Office of Industrial Security
Contract Administration Services
Defense Supply Agency (13 Aug 73)
Subject: Hoover Institute Declassification Program

Reviewer: EHM

18 Apr 81

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WAR DEPARTMENT
MILITARY INTELLIGENCE SERVICE
WASHINGTON

20 September 1944

Lieut. Colonel B. T. Pash,
Chief, ALSOS Mission,
c/o A. C. of S., G-2, ETOUSA,
APO 887, c/o Postmaster,
New York, N. Y.

My dear Colonel Pash:

Your good work in tracking down and taking custody of "the biggest target" and then taking him to London for questioning was brought to my attention. I brought it to General Bissell's attention in turn and asked him to write you a letter of commendation. This letter has been written and a copy of it is being placed in your 201 File and another copy will be attached to your next Efficiency Report. Congratulations on your work!

Letters were sent also to Brig. General E. L. Sibert and Brig. General T. J. Betts commending them for their part in the activities.

Kindest regards.

Sincerely,

R. A. OSMUN,
Brigadier General,
Chief, Military Intelligence Service.

Incl:
Ltr. frm Gen. Bissell,
dtd 18 Sept. 1944

DECLASSIFIED 17 Nov 81.
(see back of document) date

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AUTHORITY: MEMORANDUM FOR Chief, Office of Industrial Security
Contract Admin [illegible]
Defense Supply Agen[illegible] (Aug 79)
Subject: Hoover Institute Declassification Program
Reviewer: EHM

f. Have american flag (of very good material) on staff on jeep and give them 3 extra flags. (We are mistaken for germans).

g. Also get 7 american flag shoulder patches (airborn type).

20 Sept. (2 Church) '44

Lt Col. Eckman:-

Following action will be taken:

1. Have one jeep and trailer with Friebig and Beaton come to meet us. Following plan will be ~~follo~~ put into effect.

a. Have 20 five gallon cans loaded in jeep

b. Also put in rations for seven for 7 days and additional coffee as much as you can get (very important) and a little easy.

Bn Kahl.

f. Have american flag (of very good material) on staff on jeep and give them 3 extra flags. (We are mistaken for germans).

not available

g. Also get 7 aluminum flag shoulder patches (airborne type).

h. Send down at least 6 ~~boxes~~ cake of not a dozen of nice smelly face soap. (Or coffee & soap if PX officer will not give it contact Conrad & tell him it is essential).

i. Purchase and have wrapped a present 4 perfumes - one ~~per~~ bottle of at least 400 francs size (Gerlain preferred) and the other at about 250 f. size. Get perfume at reputable firm.

j. Have agent bring my camera equipment.

? k. Bring one pair of my warm underwear.

l. If possible send some extra vehicle parts such as condenser, 12v. spark coil, 2 spark plugs, fan belt, fuel pump assembly (Dodge R+C).

not available

m. Have my jeep repaired painted within 6 days.

Bob Carl.

Lt-Col. Eckman

EUROPEAN THEATER OF OPERATIONS
UNITED STATES ARMY
ALSOS Mission

2 October 1944

MEMORANDUM FOR ALSOS Office File:

Purchase of the following items, out of Confidential G-2 Funds, has been authorized by Lt. Col. B. T. Pash, Chief of Mission:

Gerlaine:

1 400 fr bottle perfume
3 200 fr bottles perfume
(different types)

Pharmacy:

10 bottles coramine

Department Store - 4 American flags - good quality.

GEORGE R. ECKMAN
Lt Col, MI

get receipts

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COPY

Memorandum sent from the President of the Union Miniere du Haut de Katanga to the Director of the Hoboken Plant (Sec. Gen. Met. de Hoboken)

September 30, 1944.

In agreement with the mission which has been asked to deal with all Uranium products it has just been decided to transfer these stocks to a safe place where they will be stored in out name.

The present letter which will be handed over to you by the officer of this mission has the purpose of giving you our agreement to dispose of the stocks of uranium products which are lying at Oolen in accordance with the instructions which will be given by them to you.

A quantity of 100 kilograms crude uranium may be kept for experiments which are in process.

(signed)

M. Robillart
President
Un. Min. du Haut Kat.

Note: M. Robillart is president in Belgium for the company during the war. M. Sengier is normally in this position.

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By CD/SR NARS, Date 24 FEB 1976

2 October 1944

TALLY OUT

The following materials were shipped from two warehouses at the Colen Refinery of the SOCIETE GENERALE METALURGIQUE de Hoboken on October 1 and 2, 1944:

Lot No.	No. of barrels.	Barrel Markings.
1	3	USB
2	50	CX
3	24	O
4	175	UA
5	27	US
6	10	K

Any inquiry concerning the above materials should be directed to the undersigned.

E. T. WILLIAMS
Brigadier, General Staff

Hdqs. 21st Army Group
2 October 1944

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Authority NND 750112
By CD/SR NARS, Date 24 FEB 1976

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contact with Lt. General Paul Tschoffen, the Head of Belgian Civil Affairs, appointed to enter Belgium together with the Allied Forces.

The address of Lt. General Tschoffen is: care of Belgian Government, Eaton Square, London.

I personally consider the following persons as the best men to contact in Belgium in connection with the Hoboken and Oolen plants, belonging to the Societe Generale Metallurgique de Hoboken.

Hoboken:	Mr. J. LEEMANS	Managing Director
	J. CORBIAU	
	[illegible] OUVELIER	
	H. LECOINTE	
Oolen:	Mr. F. JACOBS	Manager Chemical Plant
	N. DERRICKX	Manager Copper Refinery

If you have another suggestion to make, will you please do so.

/s/ Sengier

E. Sengier

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Authority NND 750112
By CD/SR NARS, Date 24 FEB 1976

Also Missions

SUPREME HEADQUARTERS
ALLIED EXPEDITIONARY FORCE
Office of Assistant Chief of Staff, G-2

Lt. Colonel Boris T. Pash, 0275706, Inf., and Major Robert F. Furman, 0350667, CE, are engaged in highly secret work for the Supreme Commander, Allied Expeditionary Force. It is requested that all to whom they apply for assistance give them access to necessary facilities and such aid as is possible.

/S/ K.W.D. Strong,
K.W.D. STRONG,
Major General,
A.C. of S., G-2.

A TRUE COPY

C.E. Ricketts

C.E. RICKETTS,
Capt., Inf.

6-9-21-8

SECRET

This Document Consists of 7 Pages
No. 3 of 4 Copies Series a

ARMY SERVICE FORCES
MANHATTAN ENGINEER DISTRICT
INTELLIGENCE AND SECURITY DIVISION
NEW YORK BRANCH OFFICE
P. O. BOX 42
STATION F
NEW YORK 16, NEW YORK

IN REPLY REFER TO EIDM MI-1 MS

19 July 1944

Subject: Interview with Edgar Sengier.

To: The District Engineer, U. S. Engineer Office, Manhattan District, Oak Ridge, Tennessee. (Attention: Lt. Colonel W. B. Parsons).

1. Reference is made to memorandum of Major R. R. Furman to the undersigned dated 15 July 1944 in which it is requested that Mr. Edgar Sengier be contacted in attempt to make arrangements to put Major H. K. Calvert in contact with officials of the Belgian Government familiar with affairs of Union Miniere.

2. The undersigned on 19 July 1944, in company of Major P. L. Merritt, contacted Mr. Sengier who was in all respects cooperative. Mr. Sengier suggested that a memorandum outlining our desires be written and suggested that he would in turn communicate the contents of the memorandum to Mr. Gurth, Minister of Finance of Belgium Government, who is presently in the United States, but who plans to return to England within the next ten days. Through Mr. Gurth, Mr. Sengier states that the proper arrangements and contacts can be made for acquiring the needed information concerning the plants of Union Miniere in occupied Europe. Sengier stated that the proposed plan of action would be to have Major Calvert contact Lt. General Paul Tschoffen who is in charge of Belgian Civil Affairs Committee in London. General Tschoffen would in turn arrange the further necessary contacts.

3. In the letter to Mr. Sengier which transmitted the memorandum, copies of which are inclosed, Mr. Sengier was requested to notify this office when the arrangements with the Belgians had been completed and to advise this office who Major Calvert should contact. When that information is received, it will be forwarded.

4. It is to be noted that Mr. Gurth, the present Minister of Finance for the Belgium Government, is a former employee of Union Miniere and that the son of General Tschoffen was formerly employed by Union Miniere as secretary to Mr. Sengier.

5. During the course of the conversation, Mr. Sengier stated that all of the available information would indicate that the Germans had not made much use of the plants at Hoboken and Oolen. The only

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WAR DEPARTMENT
A.C. of S. G-2
ALSOS MISSION

13 October 1944

TO : Reginald C. Augustine, Capt., AC, 0-560572.

SUBJECT: Instructions Re Special Mission.

1. Reference is made to Memo from A.C. of S. G-2, SHAEF, a true copy of which is attached.

2. You will take charge of certain materials and accompany them to the United States where they will be delivered in accordance with verbal instructions issued to you.

3. The above activity is a phase of the mission refered to in the document mentioned in par. 1.

BORIS T. PASH,
Lt.,Col., Inf.,
Commanding.

A true copy
Francis J. Smith
Major CE. 11/13/44.

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Alsos Mission

OCT-1944 (~~TOP SECRET~~ (OOLEN

LOG OF ACTIVITIES

September 15 - Made contact with the Alsos Mission in Paris. Lt. Col. Pash and Dr. Goudsmit had completed a trip and contacted the officials of the Union Miniere. I reviewed the reports compiled by the company at Col. Pash's request and because these papers were important, I requested an advance report be transmitted via the Alsos Mission to Washington Principal.

September 16 - Discussed the matter of movement of stocks if and when found anywhere with Lt. General Smith, Chief of Staff, SHAEF at Granville.

September 17 - Returned to Granville with Lt. Col. Pash who got priority direction from General Strong, G-2 SHAEF to the 21st Army Group, Brussels, in these investigations covering movement of any stocks found in that area.

September 18 - Lt. Col. Pash and Major Furman began investigations in Belgium. Received all possible assistance from Brig. E.T. Williams, G-2, 21st Army Group.

September 19 - Lt. Col. Pash and Major Furman went to Oolen which was under fire, for reconnaissance. Lt. Col. Pash went on to an advanced position. Major Furman returned to London with confirmed report of existence of 40 tons but without actually having seen the material due to enemy position.

September 20 - Lt. Col. Pash at Oolen. In London Major Furman made initial contact with Major Calvert, Mr. Gorell-Barnes and Ambassador Winant after it was made known that he had been advised.

September 21 - Major Furman returned to Belgium to carry forward the desired action.

September 22 - Lt. Col. Pash and Major Furman proceeded to Oolen where they visited the refinery which was still under enemy fire, found and took sample of the desired material.

September 23 - Lt. Col. Pash and Major Furman visited the Hoboken Plant; information concerning the stocks sent to Southern France was obtained. Major Calvert arrived in Brussels to make investigations accompanied by Mr. Gattiker, assistant to Mr. Perrin, who was prepared to make tests to positively identify the material.

September 24 - Lt. Col. Pash arranged for protection for the material. Enemy situation unchanged.

September 25 - Lt. Col. Pash and Major Furman went to Paris. Major Calvert in charge of intelligence investigations at Brussels, Hoboken and Oolen.

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September 26 - Lt. Col. Pash and Major Furman to Southern France with letter of introduction to Belgian contact in charge of stocks evacuated there. Major Vance reported to Paris and joined this expedition. Remained at Vierzon with FFI for the night.

September 27 - Visited Belgian contact near Perigeaux.

September 28 - Returned to Paris with Belgian contact.

September 29 - Investigations in Paris with Belgian contact.

September 30 - Lt. Col. Pash returned to Southern France with Belgian contact
October 1 to further investigate for stocks stored there. Major
October 2 Furman in Brussels and Oolen arranging for movement of stocks to England. Major Calvert in Brussels, Eindhoven, Holland continuing intelligence survey of enemy activities there.

October 3 - Major Calvert and Major Furman returned to London after movement of material and initial intelligence survey had been completed.

October 4,5, - In London preparing report on enemy activities.
and 6.

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OOLEN

September 26, 1944.

Memorandum to General Groves.

1. As you can see from the report sent to you via courier, the Enemy has in his possession approximately 1475 tons plus the war time output of the Check mines. In addition to the information sent to you I already have reports and information covering the activities of Auxer, Degussa, their subsidiaries set up in the occupied areas to handle our material, the syndicate formed in Germany to handle project affairs, the shipping companies involved, the German control of the check mines. These are being put together in formx of a report to be sent to you as soon as we get a little time. The investigations in Belgian plus the acquiring of about 60 tons there have taken allour time at the expense of other activities, but, the investigations have thusfar been very successful.

2. General Smith has given us every facility. The Oolen stocks will have been moved by the military by the time you read this letter. I acquired in Belgium a letter of introduction to a French representative of the company who is sitting secretly on all information covering the 72 tons lost enroute to Bordeaux. Gen Smith has again fixed things for Col. Pash and myself to go today into this French area without giving any hint as to our interest. But what Gen. Smith wants is a statement by the Sec't of War as to the extent of ourprogram, for the acquiring of stocks and a request fwom him indicatng his interestx in the movement of these materials. Gen Smith has not asked to know about the project. He made a request of me to radio Mr. Bundy for this statement. This I am doing thru you via this letter by Pouch. I suggest a radio be sent to General Smith in substance as follows

"The enemy is known to have over 1500 tons of material which must be actively sought and acquired during the invasionx. Information as to probable locations is known to Major Furman whose investigations in the theatre are being implemented by Lt. Col Pash, chief of the Scientific Intelligence Mission.* I understand that one movement of material has already been completed thru arrangements made by you. The nature and extent of future movements cannot be predicted. The existance of this material will in each instance be reported to you by Lt. Col Pash and it is requested that similiar arrangements be made available to this officer who will make arrangements with this office to remove the material to a location under allied control"

3. Mention of Pash and myself seems essential and helpful since we have been two junior officers running in and out of the Supreme Commanders Office, a rather difficult thing to do.

3. Major Vance has arrived and is going with us on this trip.

R. R. Furman
Major, C. E.

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p. 2-2-18

COPY
from
THE NATIONAL ARCHIVES
Record Group No. 77

MED

11.712 Belgium Misc.
Oolen Invest. Mat
shipped to U.S.

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Belg. OOLAN MATERIAL

AMERICAN EMBASSY
OFFICE OF THE MILITARY ATTACHÉ
1, GROSVENOR SQUARE, W. 1
LONDON, ENGLAND

17 May 1945

Subject: Oolan material.

To: Major Francis J. Smith,
Room 5119, New War Dept. Bldg., Washington, D. C.

1. On 12 April, while this officer was in Brussels arranging for Mr. Gaston Andre's travel to Washington in compliance with your letter dated 30 March 1945, the following points of discussion arose:

(a) Union Miniere Du Haut Katanga needs a written statement from the Allied Military Authorities indicating the material removed by us from Oolan has now been exported from Belgium; the destination of such material need not be shown. The need for such a statement is that the Belgium government requests companies to file inventory of stocks and this material has to be accounted for. Andre said he had heard indirectly that this material had been exported from Belgium. This statement was neither confirmed nor denied by this officer and the matter dropped with the statement that I would see what could be done.

Are there any objections to either this office or the 21st Army Group Headquarters furnishing Union Miniere Du Haut Katanga such a statement? If not, this office will undertake to prepare such a statement. It will be remembered that a receipt for this material was given at the time of confiscation, consequently no harm can be seen in fulfilling their present request.

(b) Inquiry was made by Mr. Andre as to whether our search for the four wagons of material that were lost in June 1940, some place between La Havre and Marseille, were ever recovered. Andre, of course, was cognizant that a search had been made as our initial information about these wagons came from him, consequently no harm was seen in advising him the wagons were still unlocated. He asked if we interposed any objection to him initiating a search for these four wagons, to which I said "No". The question of whether the Toulouse material was ever moved from there did not arise, however, Andre is cognizant that we located part of the material at that place.

Cable sent by WAC 11890
4 June to Cabinet

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Boris Pash

Allied Mission

Subject: Oolan material.

17 May 1945

(c) Henricot Company, a large steel works in Belgium, has approximately two tons of ferro-uranium and two months prior to my meeting with Andre, they were trying to dispose of this two tons, and Andre asked if we would like for him to purchase this two tons for us. The material had a 30% uranium content. He was advised that I did not believe we were interested, however, if we were we would notify him.

(d) Union Miniere Du Haut Katanga still has 600 kilos of impure uranium oxide and they want to know if this 600 kilos was of interest to us. Andre stated that they would very much like to retain this amount for the purpose of sale, in quantities not over 10 kilos each, to well established ceramics firms. By these small quantities, Andre stated they could keep the Belgium ceramics trade alive. He was told that we were not interested in that amount and had no objections to him selling this material in that small amounts and for such purposes.

2. It will be recalled in your cable number War 61111, dated 30 March 1945, it was requested that this office deliver to Mr. Van Bree a message from Sengier which stated the following:

> "Understand some representatives Union Miniere have made inquiries to Commanding Officer 21st Army Group about movement and disposition of certain materials requisitioned during September last year -- materials Gaston Andre is acquainted with. For important reasons please instruct not to make any further inquiries. All questions of payment will be arranged later when property is established between African Metals and the authorities."

The reason for Mr. Sengier's cable is explained by the attached letter written by Union Miniere Du Haut Katanga to Brig. Gen. E. T. Williams, 21st Army Group, dated 19 January 1945. Mr. Andre said that he believes Mr. Sengier must have misunderstood his message to Brigadier Williams as they had only directed this one inquiry to the Brigadier, and that they were merely trying to find out how they could get in touch with Major Furman or myself to discuss the points outlined above, and were not trying to learn the disposition of the material.

For the Military Attache:

HK Calvert

H. K. CALVERT,
Major, F.A.,
Assistant to the Military Attache.

Inclosure listed above.

A1503 Mission General

~~SECRET~~

7 June 1945

To Whom It May Concern:

During the month of September 1944, this headquarters, under authorization of the Supreme Commander, removed from the Union Miniere du Haut Katanga, Oolan, Belgium, and exported from Belgium, the following materials:

1.	Crude Sodium Salt	721 Kilos
2.	Black Oxide	2,483 Kilos
3.	Orange Sodium Salt	1,410 Kilos
4.	Ammonium Salt	46,549 Kilos
5.	Yellow Sodium Salt	5,124 Kilos
6.	Yellow Sodium Salt	3,348 Kilos

E. T. WILLIAMS,
Brigadier, General Staff.

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~~SECRET~~

Also Mission Consul

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C
O
P
Y

January 19th.1945

BRIGADIER E. T. WILLIAMS,

General Staff

21st. Army Group.

Sir,

We have in our files a "tally out" delivered by you on October 2nd, for materials belonging to our Company, shipped from the Oolen Refinery of the Societe Generale Metallurgique de Hoboken on October 1st. and 2nd. 1944.

Major Calvert and Major Furman, the officers of the U.S. Army who were in charge of the matter had undertaken to make investigations as to the whereabouts of some of the same materials left in France, and we had hoped to hear further from them in this respect. There are also some other points which we should like to submit to them.

You certainly are aware that these questions have a confidential character. It would be appreciated if you could eventually give us such indication as would enable us to get into communication with these officers or with the Mission to which they belong; the head of this Mission is Col. Patch.

"PASH"

Yours very truly,

UNION MINIERE DU HAUT KATANGA

/S/ ANDRI KOLRLIORT

DECLASSIFIED
By AC NND 760135 NARS, Date 5/26/76

GEA.GN.

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HEADQUARTERS, ARMY SERVICE FORCES

MEMO ROUTING SLIP

File

~~SECRET~~

TO THE FOLLOWING IN ORDER INDICATED:

	NAME OR TITLE	ORGANIZATION	BUILDING AND ROOM	INITIALS / DATE
1	General Groves			
2				
3				

What is the affirmative

Attached is memorandum from Major Calvert to Major Smith. This typifies what I mean in saying that the quicker the Trust Intelligence is set up the better. It seems to me that Calvert should be able to answer question (a) in the affirmative and take the action;

question (c) by buying the two tons through Andre;

question (d) by getting hold of the 600 kilos and settling ceramic use after we had control.

The only one he took action on was question (b) and in the light of our failure to find the material he is undoubtedly right in the action he took.

WAC

Well why dont you do it, Answer Calvert by cable

g

WAC

~~SECRET~~

FROM: NAME	ORGANIZATION	BUILDING AND ROOM	DATE
WAC			TELEPHONE

DECLASSIFIED 23 May 1945

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Authority NND 750112

By LN NARS, Date 5/24/76

W.D., A.G.O. Form 0115 This Form supersedes W.D., A.G.O. Form 0115, 23 March 1944, which may be used until existing stocks are exhausted.

1 October 1944 16—31046-2 GPO

SECRET
THIS DOCUMENT CONSISTS OF 8 PAGES
NO. 2 OF 2 COPIES, SERIES A

10 October 1944

Dear Bob,

A series of cables have come from UK indicating that Joliot might have been given a great deal more information about us than he gave to the interviewers. The General wants to know whether or not Goudsmit was discreet in his questioning of Joliot. Will you look into the circumstances surrounding the questioning and report. He wants to know specifically the facts of Joliot's relations with Sengier, Halban, Kowarski and Perrin. He also wants to know what connection there is between Rapkin, Auger, Joliot and Sengier.

If circumstances do not permit you to do this personally, have Calvert do it immediately and report. This is urgent. If you find that there have been any indiscretions, will you see that the matter is straightened out.

Sincerely,

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By CD/SR NARS, Date 17 FEB 1976

2-2 Boris Pash

[redacted]

Alsos Mission
General
General
1944